

GUAM ENGLISH

Emergence, Development and Variation

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Abstract

This dissertation explores the emergence, development and internal variation of the English variety spoken in Guam. The island located in the North-Western Pacific Ocean has a diverse colonial past, with each colonial ruler (Spain, the U.S. and briefly Japan) enforcing their national language on the inhabitants. As a result of ongoing close contact to the most recent colonial power, the U.S., the inhabitants have undergone a shift from speaking their indigenous language, Chamorro, as a first language to speaking English (almost) monolingually. This shift was likely promoted by language policies making English an official language to be used in the government and in education, the high presence of American media, but also a change toward positive attitudes regarding the language of the colonizer. It was particularly the WWII-generations that regarded English as the vehicle for economic success and decided to raise their children in English.

Although the socio-historic circumstances that likely led to this shift in language use have been well-documented, no research describes the influence of these changes on Guam English. I intend to bridge this gap in research by providing a general linguistic description of Guam English, as well as a more detailed analysis of the short front vowels KIT, DRESS and TRAP, including developmental patterns and inter-speaker variation. I employ the apparent time model, analyzing approximately 45 min long sociolinguistic interviews. The corpus includes 89 socially stratified Guam locals, males and females of different levels of education, ranging in age from 16 to 91 of three ethnic groups, Chamorros, Filipinos and Caucasians. A special focus is put on the indigenous community, the Chamorros, for the analysis of the short front vowels.

I find that the language shift from the indigenous language to English is reflected in the phonological, morpho-syntactic and lexical structure of Guam English: while the oldest segment of the population, locally referred to as the *Manåmko*’, speaks English as a second language and shows a multitude of substrate language influence, the younger generations not only lack a majority of those substrate-related features, but show developmental tendencies toward the variety of their colonial power, the U.S. This includes the use of more standardized features, but also signs of convergence toward a regional, ethnic variety of American English. The latter development is noticeable in a range of linguistic features that younger Guam English speakers share with regional or ethnic communities of the U.S. mainland: Realizations of the short front vowels KIT, DRESS and TRAP resemble that of ethnic California speakers. KIT and DRESS are retracting in apparent

time and TRAP remains in its low-back position, lacking a clear nasal split. Though Guam's English-speaking community generally follows those generational tendencies, there is much internal variation, as the population is stratified in regards to their ethnicity and educational backgrounds. A broad spectrum of acrolectal and basilectal speech is found in all age groups.

With this research, I hope to shed light on a previously under-researched variety of English that emerged as a result of colonial contact to the U.S. In describing the variety in detail, I am able to compare it to the developmental trajectories of other World Englishes. This includes positioning Guam English in various models suggested by scholars, such as Schneider's (2007) Dynamic Model, to better systematize developmental patterns of World Englishes. In this regard, previous research has mainly focused on Britain as a linguistically influential colonial power, whereas we know very little about Englishes emerging out of colonial contact to the U.S.

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1 Introduction

1.1 *The Research Field*

The English language has been studied extensively in the past decades, and variationist sociolinguistics has contributed to the breadth and depth of knowledge we now have about the profile of many varieties of English. In fact, the documentation of varieties of English around the world has led to the common practice of using the term “English” in a plural form – “Englishes” – to allow room for diversity (Kachru and Smith, 1985, p. 210). In the Pacific and Australasia region alone, there are works describing newly emerged Englishes in the Solomon Islands (Jourdan and Selbach, 2008), Hawai’i (Drager, 2012), Fiji (Tent and Mugler, 1996), and several areas of Australia (Bradley, 2008; Malcolm, 2008) as well as New Zealand (Bauer and Warren, 2008; Warren and Bauer, 2008). Those descriptions contribute to our knowledge of language as a variable and ever-changing concept.

This variability in the English language is not random. Instead, an intrinsic system is found in most newly described varieties, suggesting that they follow a logic that can be explained within the context of their respective speakers’ socio-historic and socio-cultural background. Weinreich, Labov and Herzog (1968) coined this “orderly heterogeneity,” accounting for the fact that language is heterogeneous in a way that succumbs to a set of constraints.

The emergence of new Englishes often follows a set pattern. In an attempt to generalize this process, theoretical models have been established that propose a trajectory that many, if not all, English varieties follow as they emerge (e.g. Kachru, 1992; Trudgill, 2004; Schneider, 2007). Kachru (1992) takes a static approach and categorizes Englishes into three concentric circles based on their current developmental state in comparison to other World Englishes: the inner circle represents norm-providing, nativized Englishes, the outer circle represents institutionalized Englishes that have become an important second language for the country, and the expanding circle represents Englishes that are spoken as a foreign language, often in regions that were not colonized by an English speaking country. Others models, for instance proposed by Trudgill (2004), Schneider (2007) or Kachru (1992), take a dynamic approach and present several stages that new Englishes undergo in becoming established varieties in their respective regions. In this process, the models focus on historical and political influences, but also on the sociolinguistic

developments and structural effects those changes entail. The various models that suggest a developmental pattern for new Englishes will form the theoretical framework for this thesis and will be explained and discussed in more detail throughout the next chapter (c.f. *Chapter One - Theoretical Framework*).

Up to this point, the models to describe the emergence of new Englishes base their suggested trajectories mainly on varieties of English that have developed out of British colonial contact. Meanwhile, we know very little about how Englishes have emerged out of American colonial contact. Schneider (2007), for example, only discusses Philippine English as an American-based variety in his model. The lack of research based on this perspective is rather surprising, since linguists from many different subfields agree on the significant influence American English has on world languages (Taylor, 1989, p. 229; Haagen, 1998; Möbärg, 1999; Bayard & Sullivan, 2000a; Bayard & Sullivan, 2000b; Bayard, Weatherall, Gallois and Pittam, 2001; Trudgill, 2019).

With the research presented in this dissertation, I hope to contribute knowledge to this gap in research by taking a closer look at a linguistic community that has been influenced by the U.S. as a colonial power, namely the U.S. island territory of Guam. I aim to shed light on the emergence of a new English variety, both from a socio-historical, as well as a linguistic perspective. This will allow me, for one, to present a holistic and historically contextualized overview of a previously undescribed variety. I hope to position the emergence process of an American-based variety in the current static and dynamic models of World Englishes. This will broaden our general understanding of the development of post-colonial Englishes and will allow us to, if necessary, adapt the interpretation and implementation of those static and dynamic models of English development.

1.2 The Research Site

Guam is an island located in the North-Western Pacific Ocean, approximately four hours flight time East of the Philippines and South of Japan. Geographically, the island belongs to Micronesia and is part of the Mariana Islands, near the ocean's deepest natural trench, the Mariana Trench. The island was first populated by the Chamorros, an indigenous people of Austronesian decent who still make up approximately a third of the island's population, along with the longstanding

Filipino ethnic group, Caucasians and others, as well as many intermixed ethnic groups. The inhabitants live in small towns, scattered around the island, mostly referred to as “villages”, whether they are more rural, such as the villages in the Southern part of the island, or more urban, such as Guam’s capital, Hagåtña. Schools are available across the island and include all levels, from kindergarten up to tertiary education, which can be attained at the University of Guam or Guam Community College. Many inhabitants commute to the center of the island for work, as most businesses are located near the most popular tourist areas, where mostly Japanese and Korean vacationers enjoy tax-free shopping, the long beaches and the tropical weather, which is only occasionally interrupted by precarious typhoon seasons.

Guam has been governed by Western nations since the beginning of the 16th century; by Spain, the U.S. and, briefly, Japan. The island has been in close and almost uninterrupted contact with the U.S. since 1898 and has been politically recognized as a U.S. territory for the majority of a century. Approximately one third of Guam’s land mass is now occupied by the U.S. military. The effects that the U.S. has had and still has on the island are shown in the islanders’ culture but also, very saliently, in their linguistic development. The indigenous community has undergone such significant influence from their colonizer that they have shifted from speaking Chamorro as a first language to a mostly monolingual, native community of English speakers within just a few generations. Other well represented ethnic groups on the island, such as the Filipinos, have similarly been adopting the English language. With a population of over 160’000 inhabitants (CIA, n.d.), this makes Guam one of the most populous places in the world where English is spoken as a first language whose emergence and linguistic profile has not been described either holistically or in any detail yet.

Only very little is known, at this point, about the English variety that has emerged in Guam. Some scholars have described the basilectal, i.e. non-standard forms used by (mostly older) Chamorro speakers, with a focus on phonological substrate language influence (Gaynell Pool Layne, 1970; Quan, 2010). However, the variety spoken by a wider segment of the population, and its phonological, morpho-syntactical and lexical features remains undescribed. Furthermore, not much is known about the linguistic diversity of this rather heterogenous island community. Finally, the ways in which the close contact to the U.S. has shaped the now nativized variety of English remains underresearched. Throughout this dissertation, I hope to show that the linguistic findings from this research site, Guam, are a reflection of the island’s historic context and of its

close connection to the U.S. Studying a community that has undergone drastic linguistic changes as a result of colonial influence will contribute to the (scarce) research about World Englishes influenced by American English and will help to position this new variety of English in the constellation of other previously described varieties.



Figure 1 - Map of Guam (n.a., Maps of Oceania, 2019)

1.3 The Research Questions

I hope to answer questions about the emergence of and diachronic development in Guam English, a variety that has rather recently become nativized. This will then allow me to place Guam English in the World Englishes paradigm. I have kept the research questions relatively simple as this allows me to refer back to them frequently without the reader losing track of what they mean. However, the research questions are an umbrella for a rather complex background and by addressing them, I will touch upon a variety of aspects that deserve a lengthy discussion throughout this dissertation.

1. How did English emerge in Guam, socially, historically and linguistically?
2. What is the phonological, morpho-syntactical and lexical structure of Guam English?
3. In what ways is Guam English converging toward the variety of its colonial power?
4. What factors shape linguistic variation in Guam English?
5. How can Guam English be categorized within a constellation of previously described World Englishes?

The first question, *How did English emerge in Guam, socially, historically and linguistically?*, requires an extensive discussion of Guam's social history, which explains the community's frequent contact with native speakers of American English and the emerging relationship between the island and one of its colonizers, the U.S. In attempt to answer the first research question, I will also address Guam's development from speaking English as a second language (L2) to a first language (L1).

In answering the second research question, *What is the phonological, morpho-syntactical and lexical structure of Guam English?*, I will provide an extensive overview description of the language. This includes a phonological, morpho-syntactical and lexical description of the variety. For this part, I will purposefully focus on breadth rather than depth in order to provide a first general account of the Guam English. Subsequently, I will provide a much more detailed, quantitative analysis and discussion of one set of linguistic features, namely the short front vowels, in the local English spoken by the indigenous community, the Chamorros. This focus was chosen as it will allow me to comment in detail on a salient feature that reflects the variety's variation and

change and social stratification. Linguistic *change* will be addressed in both the broad description of Guam English, as well as the more in-depth account of the short front vowels.

The findings of the first two research questions will allow me to answer the third, *In what ways is Guam English converging toward the variety of its colonial power?*, as it can be answered through an in-depth comparison of the linguistic profile and developmental trajectories of Guam English with regional, social and ethnic varieties of American English. The particular focus on the short front vowels will allow me to point to potential target varieties to which Guam English appears to be converging in terms of its phonological developmental patterns.

I will further elaborate on the fact that developments in Guam English are not entirely homogenous. By posing the fourth research question, *What factors shape linguistic variation in Guam English?*, I underline that it is the potential *variation* within Guam English that is of interest to me as much as the attempt to uncover a general pattern. A continuum of basilectal and acrolectal speech, i.e. a range from low to high levels of standardization, is expected in a community of any size, but especially in one with such a diverse social history. Apart from the wide range in age groups, three ethnic groups make up plurality groups in Guam; Chamorros, Filipinos and mainland Americans. Additionally, there are many more Pacific islanders, Japanese, Koreans and others residing on the island that undoubtedly influence the linguistic climate. Other social factors, such as the islanders' mobility off-island, or their level of education may additionally influence the variation found in Guam English.

The fifth research question, *How can Guam English be categorized within a constellation of previously described World Englishes?*, entails an explanation of how Guam English emerged in comparison to other World Englishes. For this, I will provide a detailed account of the developmental models around post-colonial Englishes, with examples of varieties that have gone through several stages of those models (c.f. *Section 2.1.1 - Developmental Models of New Englishes*). Finally, I will place Guam English within the World Englishes paradigm, with remarks on how this American-based variety differs from the previously assumed framework based on varieties emerging out of British colonial contact.

1.4 *The Variables*

For the quantitative analysis, I take a closer look at the short front vowels, namely KIT, TRAP and DRESS and two reference vowels FLEECE and FACE. The focus on this coherent vocalic subsystem is based on the fact that it enables me to investigate, in phonetic detail, the ways in which Guam English is (or is not) converging to some variety of American English, for which regional, social and ethnic differences in vowel production has been documented extensively (e.g. Eckert, 2000; Drager, 2013; Labov, Ash and Boberg, 2006). I analyze the position of the three short front vowels and their reference vowels in the vowel space and comment on their change in position over the past decades. In an apparent time model, I analyze whether the social factor *age* affects the realization of the vowels. I further analyze other potential social influences on the realization of the vowels, namely the speakers' educational background (basic and further education) and sex (male, female). I also investigate linguistic constraints by looking at the phonological environment as a potentially influential factor.

Of recently published variationist sociolinguistic research, many works include an analysis of vowel production in various English speaking communities. This includes not only inner circle and L1 varieties, such as American English in various regions (e.g. Drager, 2013; Eckert, 2008), but also outer circle, expanding circle and generally L2 varieties around the globe, including lesser known varieties of English (e.g. Tayao, 2008; Schreier, 2010), many of which will be mentioned in this thesis at one point or another. Vowels tend to be the center of many linguistic studies, presumably because they are so regionally variable. Thus, they can provide information not just about regional peculiarities (in the U.S. only, several regional vowel shifts have been traced and documented extensively over the past decades (Labov, Ash, & Boberg, 2006)), but also about language development over time and about assimilation or dissimilation of various social classes and ethnic groups toward a general norm. A detailed analysis of the short front vowels of Guam English will add to the general knowledge about regional English variation and give information about how a language community living far away from the U.S. mainland yet being socially and politically tightly intertwined with the country may adapt their vowel features according to U.S. regionalisms.

1.5 Methods

To answer the research questions listed above and the many sub-elements they entail, I employ variationist sociolinguistic research methods (c.f. *Chapter 3 - Methods*). This includes an in-depth analysis of Guam's social history, several fieldwork trips to the research site for linguistic and ethnographic data collection, the production of a written corpus of transcribed sociolinguistic interviews, as well as the qualitative and quantitative analysis of that data with an apparent time approach. An in-depth discussion of the various methods I employ will follow in *Chapter 3 - Methods*.

1.6 Principal findings

In this research project, I hope to provide both meaningful and comprehensive answers to the five main research questions stated above. All five questions will be addressed throughout the thesis and at length in *Chapter 6 – Discussion and Conclusion*. In the context of the first research question, *How did English emerge in Guam, socially, historically and linguistically?*, the historic account of the island will allow the reader to better understand the importance of a “speck in the ocean” for research investigating the spread of English through colonialism. An outline of the connection to the U.S. will show the various factors that have caused a shift in the island community toward an American cultural and linguistic norm. I will point to the several political measures that have been taken to enforce English language use, but also to the change in attitude toward English and the U.S. that has primarily affected the post-war generation. I will define the conditions that have caused the community to shift from speaking Chamorro as a first language to speaking English as a first language. The post-war generation that had viewed the English language as a vehicle to success was the driving force behind this change, particularly the women for whom the English language allowed an entry into the workforce.

The principle findings of the second research question, *What is the phonological, morpho-syntactical and lexical structure of Guam English?*, are intertwined with what I argue in my discussion of the first research question. As a result of the close contact with the U.S., I find evidence both in the overview linguistic description as well as the short front vowel analysis, of Guam English assimilating toward an American norm in an apparent time process. Evidence for this is the loss of L2 language features, such as the use of present tense to refer to past events, and

the interchangeable use of male/female pronouns, which are present in older speakers but have disappeared out of the repertoire of younger, acrolectal speakers. This change affects both the Filipino as well as the Chamorro locals. The same findings are shown in the quantitative analysis, where I focus on the Chamorro community only. The short front vowels show a movement away from L2 features (e.g. predominantly merged KIT and FLEECE vowels in stressed syllables) toward a more regional American norm. *Age* is the overall significant social factor that, at times in interaction with other social factors, predicts change for the vowels KIT, DRESS, as well as the reference vowel FACE. The short front vowels KIT and DRESS are retracting in apparent time, while TRAP remains in its rather low, central position. Overall, the most significant changes in the production of the short front vowels happened in the generation that was raised shortly after WWII. In that same generation, I also find a slight raising of TRAP in pre-nasal positions, which is less evident in speakers of other generations. The vowel changes found in Guam English are comparable to changes found in American (regional) English(es), which further contributes to answering the third research question, *In what ways is Guam English converging toward the variety of its colonial power?* It is particularly the linguistic difference between the pre- and the post-war generation that reflects this change. I will theorize that Guam English has developed not simply toward an American norm, but is most likely assimilating to an ethnic or regional American English. The locals' close social connection to the state of California and their status there as "ethnic Americans" provide a potential explanation for the hypothesis that Guam English speakers show linguistic similarities to Chicano California English speakers, or Asian American English speakers, for instance in their back production of the short front vowels and their general (although not universal) lack of a nasal system in TRAP.

In answering the fourth research question, *What factors shape linguistic variation in Guam English?*, I conclude that the development of Guam English does not follow an entirely homogenous pattern for all speakers. Instead, as is the case for many linguistic communities, there is a significant amount of variation and a continuum of acrolectal and basilectal speech, not only between the various generations, but also within the same age groups. This is particularly illustrated in the case studies of four male speakers of approximately the same age, who show great variation, most likely due to their ethnic background, level of education and assimilation towards a regional American norm and potentially other social factors that were not part of the quantitative analysis.

In answering the final research question, *How can Guam English be categorized within a constellation of previously described World Englishes?*, I will be able to site Guam English with respect to other world Englishes that have been examined so far, based on the developmental trajectories proposed by Kachru (1992), Trudgill (2004) and Schneider (2007).

1.7 Outline of the Thesis

The thesis contains four main chapters. In chapter one, the *Theoretical Framework*, I will introduce the most relevant linguistic theory for the emergence and spread of the English language, particularly the spread into regions that have been under colonial influence by an English-speaking country. In this context, both static and dynamic developmental models of New Englishes will be introduced and critically discussed. Furthermore, I will address linguistic processes, such as the transmission and diffusion of features, the influence of substrate languages, and the influence of the language of the colonial power, which is not homogenous, but includes its own regional, ethnic and social variation. I will give this last point more room, as it is likely a variation of the colonial target language, i.e. American regional, ethnic English, that Guam English is converging toward.

In chapter two, *Social History and Linguistic Context*, I will provide an extensive account of Guam's history, which serves several purposes. It gives the reader a better idea of the research site and its development before and during colonial influence. It also serves as a foundation to answer the first research question, as I will explain when and how English arrived in Guam. In this chapter, I will also include a general overview of the several linguistic influences that have played an important role in the formation of Guam English. This includes the various substrate languages, such as Chamorro, but also other Pacific Island languages. I will also describe the relevant ethnic and regional varieties of English that have been present on the island; most importantly, Philippine English.

In chapter three, *Methods*, I will recount the methods I employed for both the overview description and quantitative short front vowel analyses of Guam English, and I will provide the theoretical background information for the chosen methods. This includes methods for data collection (preparatory work, including research on the history of Guam, defining the speech community and sample size, the sociolinguistic interview), data processing (interview transcription), as well as data analysis methods for the compilation of the linguistic overview and

the quantitative analysis of the short front vowels (auditory analysis, Forced Alignment and Vowel Extraction, statistical methods).

Chapter four, the *Results* chapter, will be divided into four sub-chapters. The first will provide a general linguistic overview of Guam English, which will include comments on phonetics and phonology, morpho-syntax, lexis and non-verbal communication of Chamorros as well as Filipino and mainland American Guam English speakers. In the second sub-chapter, I will provide the results of the quantitative analysis of the short front vowels, focusing on the Chamorro ethnic group. In the third sub-chapter, I will discuss variation I have found in Guam English with the example of case studies of four young males of the same age group, Jack, Eric, Kyle and Seth, who show variation in their level of standardized speech, most likely due to their ethnic background, level of education and assimilation towards an American norm. In a fourth section, I will provide a comparison of Guam English to the language of its former colonizer, American English, and will comment on potential developmental trajectories of the variety.

Finally, I will provide an in-depth discussion of my findings and draw connections to the theoretical background, which leads me to my conclusions about the emergence of and development in the nativized English variety spoken in Guam and its classification amongst other World Englishes.

1.8 Terminology

Throughout this thesis, I use a range of terms that I would like to briefly explain further here. Perhaps the most frequently used term is the one I use to label the English variety in focus, *Guam English*. It is used in describing the variety of English spoken by informants who have acquired their English for the most part on the island of Guam, focusing mainly on Chamorros, as they represent the longest-standing ethnic group on the island, but also Filipino and Caucasian locals. *Guam English* therefore entails a broader grasp of the variety than the previously used terms “Guamanian Dialect English” (Kehoe, 1975), “Guam Dialect of English (GDE)” (Underwood, 1989), “Guamanian Dialect English” (Babasa, 1982), or “Guam’s Colloquial Chamorro English (GCCE)” (Quan, 2010), which focus on the non-standard speech of Chamorros. I refer to the variety as “*Guam English*” rather than “*Guamanian English*” because of the stigmatization that the latter term has received over the years. After WWII, “Guamanian” was introduced as a

reference to all permanent residents of the island, including, but not limited to Chamorros. The use of this term had been decided on through votes in informal school poles (Rogers, 1995). Nowadays, however, its meaning has changed to denoting non-Chamorro Guam residents, while Chamorros are increasingly referred to as “Chamorros” (Underwood, 1982). Throughout this thesis, I will mainly employ the term “locals” when referring to Guam residents of all ethnic groups. At one point I discuss “Guamanian Chamorros” as a group, but only in the context of diaspora communities on the U.S. mainland, where I would like to stress the difference between Chamorros coming from Guam as opposed to the neighboring Northern Mariana Islands.

A similarly complex terminology revolves around “White residents of Guam”, for whom a variety of terms are used. Since the great majority of Caucasians on the island come from the U.S. mainland, they are often simply referred to as “Americans”, although all Guamanians, including the indigenous, are in fact American citizens, but “when people say American here they usually mean White American” (female Caucasian-Japanese, Gu68f30, born around 1987). In earlier days, Caucasian Americans used to be referred to as “Americanu”, and nowadays “Haolie” is used frequently. Since both of those terms can have negative connotations, I will mainly refer to White mainland Americans as “Caucasian Americans”.

Whenever I refer to individual speakers, I will use a code that was assigned to each speaker during fieldwork. The code was given, a) to refrain from using the speakers’ real names in order to ensure their anonymity, and b) to capture information about the speakers’ origins, sex and age at a glance. To use the example of the informant quoted a few lines above, *Gu68f30* refers to the following: *Gu* indicates that the speaker belongs to the Guam English database, the number *68* indicates that this is the 68th study participant, *f* refers to a female participant (as opposed to *m*, for male participants) and the number *30* indicates the speakers age (30 years old). Pseudonyms are only used for the four speakers discussed in the case study to underline the focus on the individual.

Finally, there is a small but not insignificant distinction between the pronouns *on* and *in* when speaking about an island. During fieldwork in Guam, I quickly realized that these two pronouns were used interchangeably by some, but others devoted strict meaning to the distinction. The latter group found the reference “on” Guam to be offensive, as it belittles Guam as a small island state, when in fact this nation has proven its significance in several historic contexts (c.f. *Chapter Two – Socio-Historic and Linguistic Context*). A similar discussion was taken up in much more detail than I attempt to do here by Levisen (2018), who interprets the use of Danish *i* (in) and

på (on) in chatroom references to Greenland. Because of the sensitive connotation that the use of the pronoun *on* can have in connection to smaller and larger island states, I refrain from using it in this context and will strictly use the pronoun *in*.

2 Chapter One - Theoretical Framework

2.1 *The Spread of English and the Emergence of New Englishes*

The English language has spread widely, largely in connection with colonial expansion. Until the seventeenth century, English was confined to a relatively small area, including only England and the lowlands of Scotland. As people increased their outward mobility, English began to spread with them: first into still relatively close geographical areas like the Highlands of Scotland, Wales and Ireland, and later, with the beginning of the colonial age, to overseas areas such as North (Central) and South America, the Caribbean, St Helena, the Falkland Islands, Tristan da Cunha, Australia and New Zealand (Trudgill, 1986). The majority, but not all of those places were, at the time of emigration, inhabited by natives of varying cultural backgrounds. Rather than adopting their native language, the new-coming English settlers continued using English as their main language of communication; however, inevitable language contact with the natives resulted in not only the spread of English, but also the development into distinct varieties of English.

Since then, a vast body of literature describing those newly emerging or emerged Englishes has become available, e.g. accounts of Englishes of St Helena (Schreier, 2008), the Falkland Islands (Sudbury, 2001) or Tristan da Cunha (Schreier, 2010). In fact, the title of Görlach's (2002) book, "Still More Englishes", is a fitting reflection of the developments in the field of sociolinguistics: more newly-emerging Englishes continue to be described and contextualized in their respective socio-historic context. At the heart of this research lies the query of how those Englishes developed, what their current status is, what the most salient phonetic and morpho-syntactic features are and what attitudes are voiced about them. Ideally, those questions can be embedded in a universally applicable process that all newly emerging Englishes go through.

2.1.1 *Developmental Models of New Englishes*

Only few overriding concepts that connect the developments of various Englishes and attempt to describe them in a uniform way have been proposed in the literature. Those that have, are either based on a *static* approach to describing a model of World Englishes, such as the one proposed by Kachru (1985), categorizing Englishes into groups, based on their level of nativization. It is considered a static approach, as the languages are grouped together in a way that does not account

for language change. Others look at the process in a more *dynamic* model and assume that the development towards a nativized variety of English can be described as a series of significant and distinguishable stages, such as described by Schneider (2007), Trudgill (1986, 2004) or Kachru (1992).

2.1.1.1 Static Models of the Nativization Process and New Dialect Formation in English

The world Englishes paradigm was spearheaded by Braj Kachru, who, with his work on nativized varieties of English, contributed much to the establishment of this research field in linguistics. He proposed one of the earliest and most well-established static models of the nativization status of English, the Concentric Circles Model (Kachru B. , 1985), which was initially based on Halliday, McIntosh and Stevens (1964), to a certain extent, and later on Moag (1992) (first published in 1982). Since then, the model has been changed and reproduced frequently. In his model, Kachru describes three circles to categorize world Englishes; the inner, outer and expanding circle. The *inner circle* represents Englishes that are spoken as an established native language, i.e. the Englishes of the UK, U.S., Canada, Australia and New Zealand. These Englishes are generally considered norm-providing, in other words, they represent a model for the speakers of English in the other two circles, though there is no *one* correct model of English. Inner circle speakers are generally categorized as English as a Native Language (ENL) speakers (Kirkpatrick, 2007).

Outer circle Englishes are often spoken as a second language (ESL). They are common in places that have a history of extended contact with English speaking countries, most often due to colonialism, e.g. Nigeria, Zambia and Singapore. In such places, English has an institutionalized role alongside a local cultural identity, i.e. it is an official language of the government and most likely used and taught in schools, but at the same time, the speakers embrace a local cultural identity and possibly language that preceded the contact with an English speaking country. Outer circle speakers are often bi- or multilingual, and frequently use a hybrid or mixed code between English and their indigenous language. Such hybrid languages can be found in Malaysia (Manglish), Singapore (Singlish) or India (Hinglish) (McCormick, 2012). Kachru considers the outer circle Englishes as “norm-developing”, meaning they may not be considered a firmly established variety, but that they may still function as norms for other emerging Englishes, such as the varieties considered in expanding circle Englishes.

The *expanding circle* represents Englishes that are spoken as a foreign language (EFL), eg. the Englishes spoken in China or Indonesia. Expanding circle Englishes are dependent on external language norms, most often in the form of close contact with an inner circle English nation. Though expanding circle English speakers generally do not speak the language natively, Kachru ascribes great weight to this category because it allows us to observe “the most vigorous expansions and developments of the language” (Schneider, 2003, p. 237).

The continuing relevance of Kachru’s model is, among other reasons, due to its focus on the expanding circles of English speakers. It emphasizes that language norms and standards should not be determined by inner circle Englishes only, but that the language simply “belongs to those who use it” (Schneider, 2003, p. 237). This includes non-standard Englishes that others may downplay as simply incorrect.

However, the model also has several shortcomings, for instance the fact that it favors “national” varieties and does not account for “grey areas,” where linguistic diversity may be more complex. In some outer circle countries, for instance, English may be spoken not only in official government-related areas, but also in the home (Jenkins, 2003, pp. 17-18). The inclusion or exclusion criteria for the less clearly definable emerging Englishes needs to be based on more tangible characteristics (Schneider, 2003). It also needs to account for regional and internal variation. Rural and urban areas, for instance, may show a greater difference in the status of English within one circle than two urban areas of different circles (Kirkpatrick, 2007). Those, less clear-cut aspects of language are not accounted for in the model. Finally, the idea of a static model contradicts the nature of language as ever-changing and developing. The continuous spread of English as a world language may have encouraged a more frequent use of English in recent years, turning EFL into ESL countries. Kirkpatrick (2007, p. 29) stresses that the number of English learners in China, for example, has greatly increased in the last years, which suggests its updated status as an ESL country. To give this dynamic characteristic of language more weight, recent scholarly work has focused on creating *dynamic* models of language nativization.

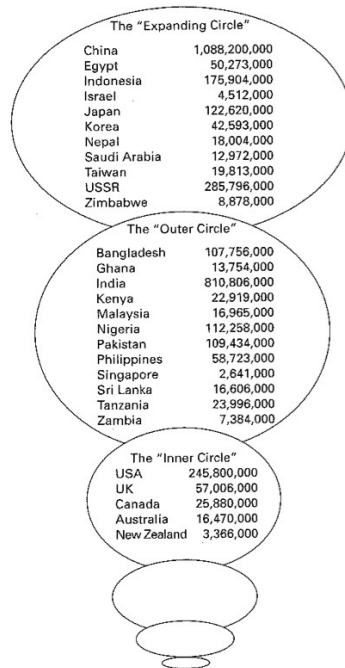


Figure 2 - Kachru's three-circle model of World Englishes (Kachru (1992, p. 356) as cited in Jenkins, 2003). Note that in this model, the circles are presented vertically, rather than concentrically and since the publication dates back almost three decades, the population numbers presented in the model are outdated.

2.1.1.2 Dynamic Models of the Nativization Process in English

Many scholars presenting dynamic models put a main focus on the emergence of English in regions that Kachru would define as outer circle or expanding circle regions¹, where English has arrived rather recently, continues to spread and is not fully established (yet). These models address this process in an attempt to formulate shared developmental steps that are necessarily taken as a language moves from being an outer circle language to an inner circle language. It may be important to stress that the concept of language development should not be interpreted in a Darwinian sense, with the connotation of the language developing toward a better, "fitter" variety, but strictly in a historical sense (Kachru, 1992). This principle also entails the idea of a language being spread rather than distributed. A *distribution* carries the connotation of a conform adoption of a norm, while *spread* recognizes change and adaptation (Widdowson, 2003).

¹ With the exception of Trudgill (2004) who put his focus more on what is considered an Inner Circle Variety in his discussion of new dialect formation.

2.1.1.2.1 *Trudgill's Model of New Dialect Formation*

Trudgill (2004) discusses three stages of new dialect formation that entail six key processes responsible for linguistic change in language or dialect contact. The three stages the processes occur in roughly correspond with three successive generations of speakers. He uses New Zealand English dialect formation as a model for the theory. As this is a context in which English emerged out of contact between various native English speakers, it is not entirely comparable with the formation of new Englishes that developed out of contact with native English speakers and speakers of a different language, as it is the case in this research work. However, the processes of new dialect formation that Trudgill describes are potentially applicable to many linguistic contact situations and offer one possible explanation as to why and/or how new Englishes emerge. Particularly the process of Koinéization, simplification, and the idea of new generations as the driving force of language change are likely applicable to any language contact situation.

Stage One: As adults of various regions (Trudgill mainly focuses on people of British origin) travel to and settle in the new location, their regional speech patterns are adapted in a process that Trudgill refers to as “rudimentary dialect levelling”. As people from various regions come into contact, very localized features, especially those that are incomprehensible to people who are not from that region, are lost. The shared speech repertoire becomes more simplified and loses heavily marked forms. This process is also referred to as *Koinéization*, involving mixing, levelling and simplification of the languages, which are key processes of new dialect formation as explained below (Trudgill, 1986). This may already start on the journey to the new location. In the case of New Zealand, for example, the long journey overseas would represent the starting point of dialect levelling. Trudgill stresses that adults are only capable of a limited level of accommodation, hence why it is referred to as “rudimentary” dialect levelling. The more drastic changes occur in the following stages and are often lead by younger generations.

Stage Two: At this stage, the newly formed community is still in a diffuse dialect situation with no homogenous dialect among the adults. The second generation, which is formed by the descendants of the stage-one-speakers, have no single peer dialect to adopt. Rather, there are many individual varieties of English spoken, to which they may adapt. This is likely to lead to “individual accommodation strategies” (p. 101), resulting in inter- and intra-individual variability. Trudgill specifically refers to a case study, Mrs German, a second-stage New Zealand English speaker, who shows variants from different European English dialects, reflecting the linguistic situation she

grew up in during this less than homogenous stage of new-dialect formation. In stage two, localized features of the older generations are not deleted out of the speakers' repertoire as they were in stage one, but rather, they are simply not picked up by younger generations. Trudgill calls this process "apparent levelling" (p. 111).

Stage Three: The third stage further fine-tunes the larger selection of variants. This process is referred to as "variant-reduction" and is often lead by children. Out of the larger spectrum of variants that are used in the rather newly formed community, children adopt or "select" (p.115) the most common ones. Most often, only a single feature is passed on, which extensively reduces the previously larger spectrum of variables. As an example, Trudgill mentions that the phonology of New Zealand English at the time of his writing mostly resembles that of Southeastern England; not because most immigrants came from this particular area (though a considerable number did), but more so because the features of this regional dialect also happened to be "majority forms in the original dialect mixture" (p. 115) and hence were adopted by the younger generations.

Six key processes are described by Trudgill as playing a significant role in the three stages of dialect formation. These processes may be expanded to linguistic situations other than the one described by Trudgill and will be discussed in more detail in the discussion section of this thesis (c.f. *Discussion and Conclusion*). Already in the first stage, the coming together of different dialects in a newly formed community marks the beginning of a new language variety, which Trudgill refers to as *mixing*. Australian English is an example of the result of dialect mixing: A majority of the people who initially migrated to Australia were from south-eastern parts of England, but the Irish and Scottish population eventually took on a considerable number. As a result of the various dialects coming into contact and intermixing, we now find traces of all of them in Australian English, particularly in the form of lexis (Trudgill, 1986, p. 142).

During the process of *levelling*, many language varieties that are commonly represented in the intermixed community are lost and a more homogenous variety is formed. Canada is an exemplary region where dialect levelling was reached to a great extent in the initial colonization period of the country. As people started to move into the various areas of the country quite quickly, this homogenous variety spread and maintained a relatively levelled form until today (Trudgill, 1986, p. 146).

In dialect levelling, the process of *unmarking* also plays an important role. Generally, simpler, more regular forms will survive, even if they do not represent the form used by the majority. Trudgill exemplifies this with research by Penny (2000) on American Spanish. Apparently, in the development of American Spanish, many dialect features of Andalusia were adopted, not because of a speaker majority but because of the structural simplicity of those dialects, such as the merged sounds (e.g. merger of /θ/ and /s/; syllable-final /r/ and /l/).

At the same time, there is potential for *interdialect development*, in which forms that were not present in any of the original dialects emerge through contact between them.

Trudgill further discusses *reallocation*, the process where several variants from different dialects remain in use but may be ascribed new social or stylistic value. This occurred, for example, in Australian English, where both /æ/ and /ɑ:/ in words like *dance* can be used, but their usage depends on social class (Wells, 1982, cited in Trudgill, 1986, p. 153). The same feature has an entirely different connotation in England, where the use of /æ/ and /ɑ:/ does not depend on social class, but is rather an indication of a speaker's geographical origin. Hence, in the process of several dialects coming together, both features survived and were attributed different social meanings than what was found in the mother country at the time.

Finally, *focussing* (LePage & Tabouret-Keller, 1985) is a process that takes place when the newly emerged, or levelled forms acquire stability in the new dialect. The language is clearly distinguishable from others and there is a general agreement among its speakers about what constitutes the language and what doesn't. This is, for example, the case in many European languages. In other places, however, there may exist a much more diffuse state between several languages, such as in Belize, where English, Creole and Spanish may be used to varying degrees in a single speech event (Trudgill, 1986, pp. 83- 89). Though the example discussed here uses distinct languages to describe the concept of focussing, a similar process may be possible in regard to dialect focusing, which can be more or less distinct from one another.

The above mentioned processes are not only common in new dialect formation in a post-colonial context. Many of them are applicable in all situation of dialect or language contact. Britain (2002), for example, found evidence of levelling, simplification, reallocation and focussing processes in his analysis of past tense *be* and the variants *was* (in positive contexts) and *weren't* (in negative contexts) in the British Fens. Locals started to come in contact with speakers of other varieties of English from the Southern part of the country and adapted their speech accordingly.

This makes the model presented by Trudgill valuable for any linguistic research, but it has nonetheless been particularly influential in the field of post-colonial English language research.

2.1.1.2.2 Kachru's Model for Non-Native Englishes

Kachru (1992) presents another version of a dynamic model, where he puts less focus on the political and socio-historic development of the various places, but rather on the changing attitudes towards the newcomer language, English, at a time where a local variety of English has already emerged.

Kachru suggests a stage one, *non-recognition*, during which the local variety of English is not recognized or accepted, instead, the language of the colonizer is idolized. He states, “a ‘brown sahib’ is more English than the Englishman; he identifies with the ‘white sahib’ in manners, speech, and attitude” (p. 40). This illustrates his claim that at this stage, the language or variety of the colonizer is preferred over the local one, which Kachru considers a symbol of anti-nationalism.

In the second phase of Kachru's model, he suggests that the English used in the colony is diffusing into several varieties, among others, recognizably local varieties of English. At this point, those local English varieties are still highly stigmatized and low on the attitudinal scale, even though they are widely used. Kachru uses initial stages of Indian English as an example, where he recognizes that it was used frequently. The desired variety - British English - was to a large extent not available to the locals, but to be called out as an Indian English speaker was nonetheless an “ego-cracking linguistic insult” (p. 40).

The third stage represents the starting point of the recognition and acceptance of the localized variety as the new norm. Language attitudes and actual linguistic behavior come into agreement. The local language may even be used in teaching, where the local cultural context is stressed and the focus moves away from the previously sought after international norm. Cameroon English, for example, has been promoted to become an intricate part of the school curriculum, so that the teaching staff has now started to embrace and teach the local variety in the classroom, though this has been met with both positive and negative reactions by Cameroonians, as the debate about local versus “wrong” English is still strong (Essossomo, 2015).

2.1.1.2.3 Schneider's Dynamic Model

Schneider (2007) proposes a unified systematic approach to the study of Englishes that have emerged under colonial contact situations between English speaking settlers and indigenous people. He coined the term “Postcolonial Englishes”, referring to the quite distinct varieties around the world that developed during the colonialization period. He claims that postcolonial varieties of English may share a uniform developmental process, going through or having gone through a series of characteristic phases, which accounts for many similarities found in these varieties. He distinguishes five phases: *Foundation*, *Exonormative Stabilization*, *Nativization*, *Endonormative Stabilization*, and *Differentiation*. For each phase, he includes the discussion of several parameters that are considerably reshaped as the indigenous and the new settler group form a new, joint community: *Extralinguistic factors* refer to the colony's history and changes in political status that may influence language throughout the five proposed stages. *Identity construction* is a fluid concept of how the involved parties identify themselves in light of the changing environment throughout the five phases. They are reshaped for both the settlers as well as the indigenous people as they come into contact with each other. In referring to *sociolinguistic conditions*, Schneider considers the circumstances in which language change occurs when two or more groups with different language backgrounds interact. This concerns language attitudes and norm orientations in particular. As a result of these conditions, he considers *linguistic consequences*, which focuses on the form of structural changes of the English used by both the settlers and the indigenous.

Schneider points out that the five phases should be considered from various sides; the perspective of the colonizers that settle in a new area and the perspective of the colonized, usually indigenous people that come into contact with the powerful arrival group. Schneider regards these two groups as two separate but interwoven strands, calling them the “IDG strand”, representing the indigenous, initially non-English speaking group and the “STL strand” for the settlers who are English speaking natives (p. 31). The two strands undoubtedly go through very different experiences of adjusting to the new situation of co-habiting a colonized area. Alongside them is often a third strand, the adstrate or “ADS” strand, which represents “speakers of large population groups migrating to a country where the English-speaking population had already established itself” (2007, p. 58).

The indigenous strand most commonly is expected (sometimes forced) to learn English, which leads to several generations of ESL speakers who may, later on, raise generations of ENL speakers. The STL speakers, though they may be in a norm-providing position, similarly go through changes influenced by the contact with natives or newcomers of other dialect regions. The two strands, IDG and STL, will become closer intertwined and will gradually forge a more homogenous community during the development of a new nation, but will eventually reestablish differences when the new nation is independent and self-dependent in the final phase of the model. The five phases described below are summarized by Schneider in *Figure 3 - Evolutionary cycle of New Englishes*, where the influential parameters on both the indigenous and the settler strand are listed and described.

The *Foundation* phase marks the initial time period when a region is first settled by English speakers who come into contact with the indigenous people. The motivations behind the settlement may vary, but often the initial contact is due to political interests of the settlers, for instance to relocate military forts and/or trading posts or for missionary activities (p. 33). At this stage, the number of settlers remains relatively small and the contact between indigenous groups and the settlers is limited and may be friendly or hostile. There is no homogenous group identity feeling between the two groups at this point. The settlers still very much identify as part of their original nation but even within this group, there is no homogeneity. They most likely speak different English dialects and in this initial phase first develop a more homogenous and often simplified inter-group variety of English, similar to the rudimentary dialect levelling phase described by Trudgill (2004). A morphosyntactic example of the simplification process comes from Brunner (2014), who notes that the simplification of noun phrases in British, Singaporean and Kenyan Englishes precisely reflects their individual developmental status on the dynamic model. A simpler noun phrase is considered one with low modification levels, i.e. few or no embedded noun phrases. The least nativized form of English, Kenyan English (in phase 3), shows simpler structures than the more nativized variety, Singaporean English (in phase 4), while the former mother-country English, British English, shows the most complex structures. A phonetic example of simplification which will become relevant in discussing the development of Guam English, is the collapse of phonemic contrast between phonemes such as KIT and FLEECE, which is a common simplification in many new Englishes (Brunner, 2014). Trudgill (2004) suggests that, of the different linguistic features used by the settlers, those that help to facilitate communications, i.e.

the most broadly used and understood features, will most likely continue to be used, while regionalisms are abandoned in time, following the koinéization process. The few indigenous people who start to interact with the settlers may become marginal bilinguals, working as translators. If more extensive contact is necessary and a lingua franca is missing, some form of pidginization is also possible, which entails, by definition of the concept, the use of simpler forms and common denominators between the contact languages (Todd, n.d.). Local terms, especially those used for places and foods unknown to the settlers are likely to keep their indigenous names, even if the language customs are developing towards the settlers standards.

During the *Exonormative Stabilization* phase, the newly formed colony reaches further stabilization. As the settlers and the indigenous people are starting to interact more, a hybrid community develops, and along with it, a shift in identity perception. Settlers who previously considered their stay to be temporary, and perhaps still consider themselves as outposts of the mother country, start to adopt some local customs. At the same time, some indigenous people increasingly incorporate the language and culture of the settlers. English comes to be used more frequently and reaches official status in schools and administration. A growing, but still rather limited number of locals, usually the elite, becomes bilingual, which makes English a high-status language that is not available to everyone. Whether this English is “correct”, however, is of lesser importance, as comprehension and communication between indigenous and settlers are deemed more important. This allows for linguistic innovations, primarily on a lexical level. This development is rooted in the newcomers’ exposure to local unfamiliarities, for which they may not have appropriate terms in their language, such as references to fauna and flora (p. 36-40). In Philippine English, for instance, lexis such as *cabeza* (a headman) or *cacique* (a powerful landowner) are common in the English of older generations, suggesting a more frequent use of loan words in the earlier developmental phases of this English variety (Bolton and Butler, 2008).

Schneider ascribes the third phase, the *Nativization* phase, great weight, as it is most central in terms of the cultural and linguistic transformation of the newly emerged hybrid community. He notes a general diversion from the settlers’ mother country, though he does not go into much detail about the internal or external motivational factors for this diversion. The new community accepts the settlers, who have by now become permanent residents, as well as the indigenous group as part of a new “us” (p. 41). The community often fights for political independence from the mother

country at this point². The wish for independence and the newly emerged sense of a hybrid identity is also reflected in language use. New grammatical forms, sentence structures, further indigenous lexical borrowings (also referred to as “cultural embedding” (Richards, 1979)) and a locally marked phonology become the new norm as a distinct variety of English is emerging. Lowenberg (1986) explains the development of local innovations as “the extension of processes that are also extremely productive in the established varieties of English” (p. 5). This includes the preference of regular grammatical structures over irregular forms. One example of this process would be to treat un-countable nouns as countable ones (e.g. *luggages* in Philippine English; *furnitures* in Nigerian English). Lowenberg also lists innovative phrasal verbs as an extension of productive processes (e.g. *to cope up with* in Philippine English, *to discuss about* in Nigerian English).

A locally marked phonology is often mentioned as one of the most salient aspects of new varieties of English and becomes increasingly salient in this third phase. Particularly stress patterns may differ noticeably from the language of the (former) mother country. While their mother country variety may be stress-timed, i.e. the words that carry meaning are more pronounced in the sentence, new varieties of English are occasionally reported as being more syllable-timed. In that case, each syllable is given approximately the same level of stress (Tay, 1982).

Often, such localized features are a way for the new nation to express their identity. Wong (1982, p. 270), for example, reports an increase in pride towards local English in Malaysians, who view it as a way to express their local identity (in Lowenberg, 1986). Similar sentiments are reported for Philippine English speakers, particularly in the higher socio-economic class, who have been reported to show acceptance and a positive attitude toward the local norms (Bautista, 2001a; 2001b; Borolongan, 2009). Even in colonies where the colonizers demographically decimate after political independence from the mother country, positive attitudes towards the English language may linger on. However, as new language forms develop, complaint from more traditional language observers is expected, as they become aware of the language change, but interpret it as a

² Perhaps as a way of simplifying his model, Schneider generalizes the historic events that led to independence for many nations, but it is worth keeping in mind that motivations for political independence were rather complex and diverse in many of the here discussed examples. It was frequently only limited internal groups that advocated for the independence of a colonized nation, and sometimes it was in fact outside forces that pushed this political matter, rather than internal motivators.

deterioration from the original ideal. As stated in Schneider (2003), Milroy and Milroy (1985) coined this the “complaint tradition”.

On entering the *Endonormative Stabilization* phase, the former colony has not only reached political independence but an “Event X” (Schneider, 2003, p. 49) has made it clear that the connection to the mother country is no longer rewarding or desired. An example of this would be the moment when Australia found itself without support from the British in combat with Japan during WWII. With the “birth of a new nation” (p. 49) comes striving for cultural and linguistic homogeneity. Though at this point, inter-group variability may exist in the English spoken in the newly established community, Schneider states that it is often downplayed as part of an effort to create an independent, homogenous society, and this localized variety of English becomes the new and official standard. This includes the production of dictionaries and grammar books, as well as a flourishing local literature that emphasizes local identity. Writers may even employ local English in literary works, as done by Ken Saro-Wiwa (1997), who employed “Rotten English” to portray a Nigerian character of lower education in his novel *Sozaboy* (Görlach, 2002, p. 46). It is important to keep in mind that surely there is still a great deal of linguistic variation at any stage in the nations that Schneider describes and a society is rarely entirely homogenous. However, perhaps the voices that are heard the most only come from a smaller group advocating for language homogeneity and the rules to secure this homogeneity. It is likely not the voices of the non-standard lower class that are asking for this homogeneity, but more so those of a local elite that perhaps considers their speech to be an ideal model for the entire society. This is not to say that no homogeneity is notable at this stage, but perhaps in addition to some groups of the society demanding it, it is simply the result of *koinéization*, i.e. language levelling and simplification due to linguistic contact.

Finally, *Differentiation* is described as the phase when the now independent nation is also self-dependent. A stable political identity separate from that of the former mother country persists. As the focus is redirected inwards, the new nation may develop internal social heterogeneity which is also reflected in the language. Smaller speech communities may emerge and new dialects may develop (p. 52). At this point, the closely intertwined strands of indigenous and settler groups may diverge once again and express their individual identities more openly. Schneider also stresses the possibility of multiple languages being used simultaneously in the same location. Aside from English, local languages therefore may be increasingly used.

Not many varieties of English have reached this phase to date. Generally, only Australian English, American English, Canadian English, and New Zealand English are considered as examples (Schneider, 2007), which are all considered inner circle Englishes by Kachru (1992). In the case of American English, for instance, the entry in this last phase is clearly defined, as the Spanish-American War in 1898 and America's consequential development into a colonial power symbolizes national consolidation. Linguistically, this was expressed by the publication of Webster's dictionary that included both American and British variants as correct and official forms of English (Peters, 2014). Similarly, Australian English entered the final phase of Schneider's model within a clearly allocable time period. Succeeding the above described event X, at which Australia was left without support from the British during WWII, measures were taken to give Australian English greater weight as a national language. Their broadcasting language policy, for example, ceased to exclusively hire British reporters and started to prefer Australians (Peters, 2014, p. 109).

Examples for the emergence of smaller speech communities and the formation of new, distinct dialects in this phase can be found in both contemporary Australian and American English. The varieties have a diverse subset of dialects that emerged from socially, regionally and ethnically variable influence. In the U.S., for example, African American Vernacular English is one of the most well-represented and well-described ethnic varieties of American English. It was officially recognized as a dialect that diverges from the generally accepted language norm as early as the 1960s (Wolfram, 1969). In Australia, it is Aboriginal English that could be similarly interpreted as an ethnic dialect of English that developed separate from the (White) colonial English of the region (Siegel, 2012).

STAGE	HISTORY AND POLITICS	IDENTITY CONSTRUCTION	SOCIOLINGUISTICS OF CONTACT/ USE/ATTITUDES	LINGUISTIC DEVELOPMENTS/ STRUCTURAL EFFECTS
1: Foundation	STL: colonial expansion: trade, military outposts, missionary activities, emigration/settlement IDG: occupation, loss/ sharing of territory, trade	STL: part of original nation IDG: indigenous	STL: cross-dialectal contact, limited exposure to local languages IDG: minority bilingualism (acquisition of English)	STL: koinéization; toponymic borrowing
2: Exonormative stabilization	stable colonial status	STL: outpost of original nation, 'English-plus-local' IDG: individually 'local-plus- English'	STL: acceptance of original norm; expanding contact IDG: spreading (elite) bilingualism	lexical borrowing (esp. fauna and flora, cultural terms); '-isms'
3: Nativization	weakening ties; often political independence but remaining cultural association	STL: permanent resident of English origin IDG: permanent resident of indigenous origin	widespread and regular contacts, accommodation IDG: common bilingualism, toward language shift STL: sociolinguistic cleavage between innovative speakers (approximating IDG) and conservative speakers (upholding external norm; 'complaint tradition')	heavy lexical borrowing; IDG: phonological innovations ('accent' possibly due to transfer); structural nativization (in word formation, phrases, prepositional usage, verb complementation), spreading from IDG to STL
4: Endonormative stabilization	postindependence, self- dependence (possibly after 'Event X')	(member of) new nation, territory-based, increasingly panethnic	acceptance of local norm, positive attitude to it (residual conservatism); literary creativity in new variety	stabilization of new variety, homogeneity, codification (dictionary writing)
5: Differentiation	stable young nation, internal sociopolitical differentiation	group-specific (as part of overarching new national identity)	network construction (increasingly dense group- internal interactions)	dialect birth: group-specific (ethnic, regional, social) varieties emerge (as L1 or L2)

Figure 3 - Evolutionary cycle of New Englishes, categorized into four thematic parameters (Schneider, 2003)

2.1.1.2.4 Factors Influencing the Development of New Englishes

The challenges that all dynamic models presented here face, is the daunting task of them being applicable to a wide range of post-colonial Englishes that have emerged in a context where several distinct political and social factors played a role. A well-designed model may fit many, but certainly not all types of developments. Most often, political and linguistic changes in the colonies are simplified too much in the hopes to present a universally applicable model. The ambition to cover all examples may simply be too high, since a range of factors adds to the great variability of the overall context, including a) the type of settlement in the respective areas, b) the status of English, c) the contact among the various social groups, and d) the cultural and political context that the nation of the colonial power defines.

a) The development of new Englishes greatly depends on the *type* of settlement in the new region, as trade colonies, settlement colonies or exploitation colonies employed different strategies and customs in terms of contact between the indigenous and the colonial power. *Trade colonies* were regularly, but infrequently visited by the colonial power, as they were mainly functioning as hubs along trading routes (Mufwene, 2006). Guam, for example, was positioned along the trading route between Asia and the Americas and was occasionally visited but not settled permanently by its Spanish colonizer until much later (Rogers, 1995). *Exploitation colonies*, such as India and Malaysia, were often under the political control of the colonizing nation for the main purpose of trading material goods in profitable conditions. *Settlement colonies* are what Schneider (2003) is mainly basing his model on. It mainly reflects the relocation of European communities to new regions, e.g. Australia or New Zealand, where they formed new, heterogeneous communities and established an economy and culture separate from their original mother country. Most often in those new settlement colonies, contact with indigenous people was limited and wherever possible, the indigenous culture was marginalized and westernized (Crosby, 1986; Mufwene, 2010).

For each of the colony types, language played a different role. Wherever contact between the colonizer and the indigenous people was limited, a form of pidginization may have been the only linguistic emergence out of the contact between two communities. In the settlement colonies, however, contact between the settlers and the indigenous was often much closer and forms of Creoles emerged, but also the full adoption of the colonizer's language was a common development, especially in exploitation colonies where locals were recruited as translators or to do

government administrative tasks (Mufwene, 2006), but also in the more advanced settlement colonies, as Schneider proposes.

b) The developmental pattern of English also depends on the status of English in the various places. Wherever English was regarded as the language of the elite or was considered the official language in business, the indigenous may have been more likely to adopt the colonizers variety. In many of the examples discussed in this thesis, English had high economic value. Mair (2014) points to studies that combine research in linguistics and economy and finds that language plays an essential role in econometric models: in countries where English is spoken as the dominant language, a lack of proficiency can cost the speakers a considerable loss in wages. This was particularly found for Spanish speakers residing in the U.S. (Bloom & Grenier, 1996), where speaking the dominant language has a major impact on salary. Similar findings were presented for Canada, where bilinguals in French speaking areas earn considerably more than their monolingual counterparts (Vaillancourt, 1996). The same applies for countries where English is not spoken as an official language: Grin (2001) found that English language skills have a considerable financial value in Switzerland, even though English is neither an official nor a majority language. Wages can increase 12% and up to 30% for people with higher English language skills, when other factors such as education level and professional experience are held constant. In the Philippines, English language proficiency has led to the creation of thousands of jobs since the 1990s, when U.S. companies started outsourcing many of their call centers and employed Filipinos proficient in English (Friginal, 2007). Hechanova (2013, p. 249) particularly points out the *American* English communication skills of those workers. Good English skills have contributed to the advancement of the Philippines' economy in a way that led them to become a major "export" nation of a linguistically skilled work force. As a so-called "labor brokerage state", the Philippines sends workers of many different specialty fields abroad and the country profits from this as remittances are often sent back home (Lorente, 2018). In the case of Guam, widely shared ideals of the value of English in an economic sense played a major role in the emergence of Guam English, as we will see in *section 3.8.1 - Language Shift*. Older generations of the indigenous population raised their children in English in order to give them better economic opportunities (Clampitt-Dunlap, 1995). This, in turn, has led to English becoming the first language of much of the younger generation. English as a tool for economic success therefore is an important factor in the emergence of new Englishes and is particularly relevant in this research study. Grin (2001), however, predicts

that, as English continues to spread, proficiency in the language will improve across the board and this will eventually lead to the skill becoming more “banal”, making it a less influential factor on economic success.

c) In some locations, there can be considerable influence from a third ethnic or social group, which Schneider (2007) refers to as the “adstrate group”. This is a group that belongs neither to the settler-, nor the indigenous strand, yet shows longstanding historic connections to the geographic place in focus. In Malta, for example, aside from the local Maltese and the British, Italians played a significant and influential role on language development. Malta had established a strong social, cultural, and economic connection with Italy before the island came under British occupation (Camillieri, 1996). Italian had been the official language, and Tuscan Italian had been the lingua franca for trade between the Maltese and its geographic neighbors (Cassar, 2001). Even today, the Italian language continues to gain popularity in Malta via television, and many younger people use Italian owing to persistent media exposure (Thusat, et al., 2009). Contact with this adstrate group is reflected in Maltese lexis, where an estimate of 52% of the vocabulary used today is of Italian origin (Brincat 2000 in Stolz 2005, p. 135).

d) Finally, the development of new Englishes can vary depending on the colonial nation that is involved. At this point, linguistic research has mainly focused on the emergence of English due to British colonial impact. Only very little is known about the influence of the U.S. as a colonial nation. Schneider (2007), for example, discusses only one variety coming out of U.S. colonial contact in his model, namely the Philippines. It is likely that the linguistic context in an American colony is shaped differently from a British one. Additionally, even amongst U.S. colonies, the political involvement with their colonizer can vary, and with it, the process of the emergence of English is likely to be different. To illustrate this, the varying involvement of the U.S. as a colonial power will be discussed further in the next section, based on the examples of the Philippines, Puerto Rico and the Republic of Palau.

2.1.1.2.5 Varying Colonial Involvement and its Impact on Language Development

In considering the examples of three colonized nations that were in contact with the U.S. as their colonizer, the varying patterns of political involvement and effects on the local languages becomes evident. The Philippines, Puerto Rico and the Republic of Palau share a similar colonial past, as

they were both colonized by the U.S. following an initial Spanish colonization period³. By taking a glimpse at the language situation of these places, we can note significant differences between the three (and Guam, as will be established later). The developmental pattern also appears to differ from colonial Englishes coming out of British ruling.

The emergence of English in the Philippines happened rather quickly. In only half a century, between the initial contact with the U.S. in 1898 and the end of WWII, Philippine English completed phases one and two in Schneider's model, which resulted in over 26.6% of the population reportedly being able to speak English (Pefianco Martin, 2014). In comparison, the same process had taken hundreds of years in British colonized Asian countries, eg. in Malaysia. The emergence of *Spanish* on the Philippines had also been much less efficient, with only 2.4% of the population speaking Spanish after three centuries of Spanish influence. The mother-country nation and its political and governmental strategy in the respective colonies in this case was likely one factor that determined the development of English. The main influential factors that are listed to have advanced English at such a rapid rate in the Philippines are the use of English in mass media of communication (Llmazon, 1969), education and, albeit limited, contact between the locals and the settler strand (Pefianco Martin, 2014). Most likely, timing played an additional important factor. Colonial powers of the late 19th century did not have mass media and organized education system as vehicles to drive the spread of language, but during the time of American colonization in the Philippines, they were welcomed tools to spread the language (though the extent of the effect that the media has on language spread is still up for debate (c.f. Sayers, 2014).

Schneider (2007) positions Philippine English to be in the Nativization Phase of his model. He argues that the variety is now much less standard than what it used to be perceived as, which is an indication of the variety becoming nativized and therefore slowly but surely differing from the language norms of the former colonizer. Philippine English may have even advanced further in Schneider's model, for instance up to *Endonormative Stabilization*, phase four, based on the manifestation of local English features, a generally positive attitude toward the variety and an emerging local literature (Borlongan, 2016). The variety of English that developed in the Philippines will be discussed in more detail in *section 3.8.4 - Philippine English*.

³ With the addition of Germany and Japan as colonial powers in the Republic of Palau.

Though the colonial history is similar, Puerto Rico shows a significantly different language profile compared to the Philippines. The former U.S. colony remains an American territory until today, with English used as an official language alongside Spanish. However, in Puerto Rico, Spanish remains the language of the people, and is viewed as an integral part of the Puerto Rican cultural identity. The language is used as the preferred language for communication, even with foreigners from non-Spanish speaking countries (Nickels, 2005; Heine and Garcia-Passalacqua, 1983; Mohr, 1998; Schweers and Vélez, 1992).

In schools, English is taught from grade one through twelve, but as Clachar (1997) reports, only 20% of the population of Puerto Rico were functionally bilingual on the island in 1997. The English that is needed and used in Puerto Rico is mostly limited to reading skills with less speaking and writing (Fayer, 2000). Teachers are reported to have shown opposition to teaching in English and it was often in the context of schools where the battle against English and Americanization was fought. Attitudes toward English in Puerto Rico are closely connected with attitudes toward the U.S. and its political system (Pousada, 1999). Societal bilingualism of Spanish and English is seen as a threat to the “Hispanicity”, i.e. the cultural identity of the island (Negron de Montilla, 1971; Nickels, 2005; Clachar, 1997).

To make a conclusive remark about the status of English in Puerto Rico or its placement in models of World Englishes is difficult. English is one of the official and institutionalized languages on the island, which would make it an ESL language according to Kachru (1992) and is suggested to be the case by (McArthur, 1998). However, the prevailing negative attitudes and the common refusal to use the language in school makes the status of English more complex. Nickels (2005) suggests that English in Puerto Rico has gone through a life cycle similar to what was suggested by Moag (1992). She bases her argument on the fact that English gained, lost and regained power on the island and changed status several times. She also assumes that the status of English in Puerto Rico right now may change again naturally, following the cycle.

The Republic of Palau provides yet another example of colonial involvement of the U.S., with potentially rather with limited impact on English language use and proficiency in the indigenous population. Before Palau became politically tied to the U.S., it was colonized not only by Spain, but also by Germany and Japan, with the latter establishing a particularly close social connection to the locals, with high numbers of Japanese settlers residing on the islands and consequently

significant linguistic influence (c.f., for example, Matsumoto, 2001; 2010). In contrast to the Philippines and Puerto Rico, the U.S. arrived comparatively late in Palau. Only in 1947 did they assume administrative control over what was referred to by the United Nations as the Trust Territory of the Pacific Islands and included several other Pacific island states (e.g. the Federated States of Micronesia, the Republic of the Marshall Islands and the Northern Mariana Islands) (Faingold, 2017). Involvement was mainly through economic means, which has remained the case until today, as Palau is now an independent nation but remains in a “Compact of Free Association”⁴ with the U.S., receiving considerable funds for economic assistance. The presence of the U.S. in Micronesia, as will be established in more detail later, was perhaps always motivated by the islands’ critical geographic location between Asia and the Americas, which had gained importance in political conflicts between the two regions. In terms of settlement in Palau, social interaction with the locals, as well as the push for English to become the preferred language, the colonizer’s involvement remained limited. Settlement only temporarily spiked in the 1960s with comparatively higher numbers of U.S. teachers, volunteers, military and administrative personnel, as well as legal workers coming to work on the islands. A school system that was modelled after American standards arrived only relatively late but did have the effect that younger generations - mainly an elite group - became bilingual English and Palauan speakers (Britain and Matsumoto, 2015).

A considerable influence on the development of the English language in Palau is theorized not to have come from the colonizer directly, but actually from an adstrate group and former U.S. colony (Britain and Matsumoto, 2015). A considerable number of Filipinos reside on Palau⁵, and assumingly communicate with the indigenous in English, at least in the initial years of their stay. They have been coming to Palau as workers since the mid-1980s and are often in close social connection with the locals, for example in employments as domestic workers. The role of Filipinos as an adstrate group will be touched upon again at several points throughout this thesis, as they are similarly prominent in Guam and have been since the Spanish colonization period.

⁴ Under the terms of the Compact of Free Association, the United States is responsible for the security and defense of the Republic of Palau, as well as the Republic of the Marshall Islands and the Federated States of Micronesia who carry a similar status. Palau’s citizens are allowed to work and study in the United States without a visa, but they are not considered US citizens or nationals (Leibowitz, 1989).

⁵ 18.7% of Palau’s population is originally from the Philippines (Office of Planning and Statistics, 2015)

The English spoken in Palau has been linguistically described, as well as compared to Schneider's (2007) model: Britain and Matsumoto (2015) consider Palau English to be in phase two of the model, i.e. the Exonormative Stabilization Phase and potentially on the verge of entering phase three, Nativization. Despite the initial lack of social interaction between the colonizer and the locals, the language has spread and is frequently used by a considerably wide range of speakers, particularly in the administrative sector. Locally distinctive structures have emerged and are described by the authors, ranging from lexical and grammatical features to phonetic and phonological peculiarities. However, perhaps due to the rather hands-off governmental style of the U.S. in this example, the local language is still widely used and is in fact deemed more important by the locals (Matsumoto, 2001).

In this section, I have discussed the process of the emergence of English in a colonial contact situation, and I have presented several models, both static and dynamic, that potentially quantify and generalize this process. In comparing English varieties that emerged out of colonialism, we find that the language profile varies greatly, even if the colonizer is the same. It is essential to consider and compare the variable socio-historic contexts of emerging Englishes because it allows us to test the models further and perhaps provide suggestions for adaptation.

In the next part of the chapter, I will continue to discuss the spread of English into new regions, but the focus will shift to the linguistic processes that underlie the development of distinct regional English varieties. To explain this process, I will mainly focus on the various models of feature transmission.

2.1.2 *Processes of Linguistic Change*

A number of factors influence the ways in which linguistic features are adopted by a community and distinguishable varieties can emerge out of similar contact situations with the same colonial nations. Schreier (2014, pp. 231-232) asks and answers many questions in this regard: "why are new dialects the way they are – and why did they not follow an alternative evolutionary path instead, given all the options available in a diffuse, heterogeneous contact scenario? [...] Why do agents of new dialect formation make precisely those choices and select specific features from a feature pool – and not others?" There are several theories that attempt to answer Schreier's - and my - questions.

2.1.2.1 *Language Transmission and Diffusion from Caregivers to and Among the New Generation*

Two processes are essential to language change according to Labov (2007): transmission and diffusion. One underlying assumption of feature *transmission* is that it generally is passed on from one generation to the next. Children, as they are acquiring language, first adopt the language of their primary caregivers (Kerswill, 1996; Kerswill & Williams, 2000; Labov, 2007). As the children become older and start to expand their social networks, they start to adopt new norms. They may use the features that were passed down from their parents more or less frequently, or extend or specify their use. This process is referred to as *incrementation* (Labov, 2001, pp. 446-460). The change in speech style of the younger generation most likely follows the direction of change of the whole community and mostly affects phonetic change, followed by phonology and morphology. For example, if older generations use a raised variant of the vowel TRAP, younger generations are likely to raise the vowel even further. A peak is said to be reached around the age of 16 or 17, where young people's dialect stabilizes (Labov, 2001; Tagliamonte and D'Arcy, 2009).

Adolescents additionally adapt to the social norm of their environment and with that change their speech. They may pick up new features in school, as they interact with speakers from different communities. This way, a linguistic feature may *diffuse* from one community to another through linguistic contact. I was personally made aware of this process in my adolescence, when my parents found old recordings of my brother and myself. When I listened to us as five and three year-olds, I realized that my Swiss German vocabulary had changed from sounding much more “grown up”, i.e. conservative, to the speech of a young teenager. I had evidently adopted my parents' way of speaking when I was learning to speak, but as I had entered an additional social circle through school, I had noticeably changed into a younger person's speech mode and suddenly found the speech patterns of my younger self to sound like that of an “uncool” grown-up.

Since the expansion of social networks is more likely to occur when speakers are already close to adulthood, diffusion is generally associated with language change as a product of language contact among *adults*. Because adults' language learning abilities are limited in comparison to those of children, language diffusion as opposed to transmission works on a more superficial level (Oyama, 1973; and Payne, 1976 in Labov, 2007). Only words and sounds, and generally language features that are observable and socially evaluated are subject to feature diffusion.

2.1.2.2 *Language Transmission and Diffusion in a Multi-Lingual Setting*

In multilingual and multicultural communities, it is suggested that young children adapt to their peers much earlier than in monolingual communities. In their study of Multicultural London English, Cheshire, Kerswill, Fox and Torgersen (2011) find little to no correlation in language use between speakers as young as four years old and their respective caregivers. One indicative feature for their argument is the use of the indefinite and definite article in pre-vocalic positions, [ə] and [ðə], which is only used infrequently among adult Anglo speakers in the London area, but the younger generations show a different pattern as they are confronted with more innovative forms from non-Anglo peers in their multilingual environment. The younger Anglo speakers therefore increase the use of a feature, not because their parents use it (because they do not), but because their multilingual and multicultural peers do. In a multilingual context, therefore, older generations are potentially considered “too remote from the community norms” (p. 189) and do not function as the primary language model anymore. This is because in a multilingual context, variable features are available to the younger generations which makes it more likely for them to adopt - consciously or unconsciously - features that do not come from their older kin and therefore drive the diffusion of those features.

2.1.2.3 *The Influence of Substrate Languages*

In multilingual contexts, the *substrate* language(s), i.e. the indigenous language(s) of a region, can function as an essential factor in language change (Sharma, 2001; Thomason and Kaufman, 1988). The structure of the substrate language, which is often the speakers' L1, is applied to the structure of their L2; in this context English. As a result, new, non-standard varieties of English develop, but the non-standardness is anything but random. Instead, the changes can be explained by the structure found in the substrate language. Examples from various new Englishes with different substrate influence document this influence.

One example of substrate influence comes from perhaps the most well-researched ethnic variety of English, namely African American (Vernacular) English (AA(V)E). Wolfram (2003) and Wolfram and Thomas (2002) assume that the persisting influence of African languages may have caused a survival of some non-standard features in AAVE, despite the close contact with European American English dialects. This includes features such as the omission of inflectional -

s on third-person verbs (*he go*), omission of the copula *be* (*she nice*), and word-final consonant cluster reduction (*lif' up* for *lift up*)⁶.

An example of substrate influence on new Englishes comes from Sharma (2009). In her analysis of basilectal Indian English and Singapore English speakers, she finds differences in progressive use and copula omission for L2 English speakers with Hindi or Malay substrate language backgrounds. Both of those features she traces back to differences in the typology of the substrate language. In Singaporean English, for example, she finds a high frequency of copula omission in speakers whose first language is Malay, a language in which copula omission is a known feature. The substrate language therefore had an influence on the English variety of those speakers. Indian English speakers, on the other hand, show a different pattern, i.e. less copula omission, which again matches the typology of *their* L1, Hindi, where copula omission is rare.

Whether substrate influence can be considered an essential player in the evolution of new Englishes, however, is subject of an ongoing debate. Perhaps one can conclude that substrate influence is a potential factor of language change in a multilingual context but there are structural limitations on the type of linguistic patterns that can be adopted into English. Evidence of little or no substrate influence was found for another corpus of Malay speakers. Kirkpatrick and Subhan (2014) found that L1 speakers of Malay, a language that does not mark for tense, actually do not show less tense marking in English than other speakers who have tense marking in their L1s. Thus, they suggest the level of *formality* rather than the substrate language to be a potential indicator for less standard varieties of English.

2.1.2.4 *Angloversals*

In multilingual contexts, where English gains an increasingly significant role, similar signs of language change may be observed, which provides evidence for the adoption of universal English features, so called *Angloversals*. Sand (2005, 2008), for example, finds very similar non-standard forms across various Englishes in a corpus analysis of Indian English, Jamaican English, Kenyan English and Singapore English. Her focus is on morpho-syntactic features, namely *article usage*, *tense and aspect*, *subject–verb concord*, and *inversion in direct and indirect questions*. She argues

⁶ The discussion surrounding the origins of AAVE's defining features offers many, often contradicting explanations, and the impact of influence of African substrate languages is still debated (Wolfram, 2006).

for Angloversals as universal English features that are found in new varieties of English regardless of their substrate language. Kortmann (2010) agrees with this statement and argues that the underlying similarities in so many English varieties has to do with the process of early second-language acquisition rather than substrate language influence. We therefore find similar features in many new Englishes, regardless of their substrate language. One such example is the lack of past tense marking (zero past tense). Kortmann (2010, p. 408) finds evidence of this in regular verbs in 10 out of 11 L2 varieties of English and deems it simply a common feature of L2 Englishes.

2.1.2.5 Language Transmission and Diffusion - Cafeteria-Style

Just like when you make your way to a cafeteria or a supermarket, browse the available options and eventually pick a few items to put on your lunch plate or in your shopping basket, the same process is suggested to happen in language transmission and diffusion. Out of the available linguistic feature options, the leaders of language change, most likely the children, will pick and choose new language features, not unlike the habit of shopping for food. This metaphor shows the “pick’n’mix effects” (Schreier, 2014, p. 233) that can underlie language change, where one feature may be “chosen” out of a selection of various others. I put the word “chosen” in quotation marks, as the choice is not entirely haphazard. In the case of cafeterias and grocery stores, products are placed in a strategic way to influence the customers’ shopping habits. They are most likely to choose the ones that are most visible, look most appealing, are readily available and perhaps presented and promoted in a particularly appealing way. In the case of language, the features that are simple, positively stigmatized and used by a majority stand a better chance of being adopted by the younger generations of a speech community (Schreier, 2014, p. 243).

The analogy ought to illustrate how younger generations are given linguistic feature options in a linguistic community. They “choose,” most likely unconsciously, the options that are available and in some way most appealing to them, even if this does not follow the parents’ pattern or plan. Though there is metaphoric value to the comparison, one needs to be cautious not to oversimplify the process of language transmission and diffusion. Schreier (2014), for instance, underlines that a language feature is most likely not chosen as voluntarily and consciously as a lunch dish, and the process is mostly done collectively and not based on individuals.

2.1.2.6 Language Transmission and Diffusion - The Feature Pool

One of the most prominent and most frequently referenced theories of feature transmission and diffusion comes from Mufwene (2001), who coined the idea of the *feature pool*. Perhaps not unlike the idea of a supermarket or cafeteria full of options to choose from, the feature pool represents the image of a collective of features floating around in a community. This includes phonological, morphological, or syntactic features that speakers contribute to the pool of features as they are interacting. From that pool, new features may then be picked up by speakers that had not originally been using them. With that, the developmental trajectory of a language can be noticeably affected (Mufwene, 2001, p. 18). This is especially the case in a multilingual context, where features come from different language models and are then intermixed in a general collective. We can assume that the multilingual context offers speakers linguistic options, which makes it likely for them to include innovations that may not have been present in previous versions of the variety, thus advancing language change. Brunner (2014, p. 24) argues that feature pools with a high amount of typological differentiation are more likely to be subject to contact-induced change.

Ansaldo (2009) focuses on a multilingual context in his discussion of language transmission and diffusion by means of a feature pool. In *Figure 4 - Multilingual feature transmission according to Ansaldo (2009)*, he contrasts the mono- and multi-lingual contexts and underlines that though influences on the language learner may be similar, the process can be much more complex in the latter setting, illustrated by the more complex patterns of shading in the model. Parents or caregivers, school or educators, and friends or social networks are all main influences on the children (or adults) learning to speak English in a multi-lingual context. It is likely, however, that a language learner in the multilingual setting will adopt features in a way that creates entirely new patterns, illustrated by the noticeably different patterns in *Figure 4 - Multilingual feature transmission according to Ansaldo (2009)*. The emergence of new Englishes is therefore a result of selection and replication of a range (or pool) of available, possible linguistic features. A feature is adopted depending on how often the speakers are exposed to it, what social capital the variant carries and whether the new variant is congruent with the already existing language system. Similar to the theory of the cafeteria-style feature transmission, Ansaldo (2009) points out that speakers have a certain degree of choice when it comes to the adoption of new features from the feature pool. Those variables that are assigned higher social value are likely to

be the ones adopted consciously. The adoption of others may follow an unconscious reaction to the feature's "cognitive salience, typological dominance as well as frequency" (p. 135).

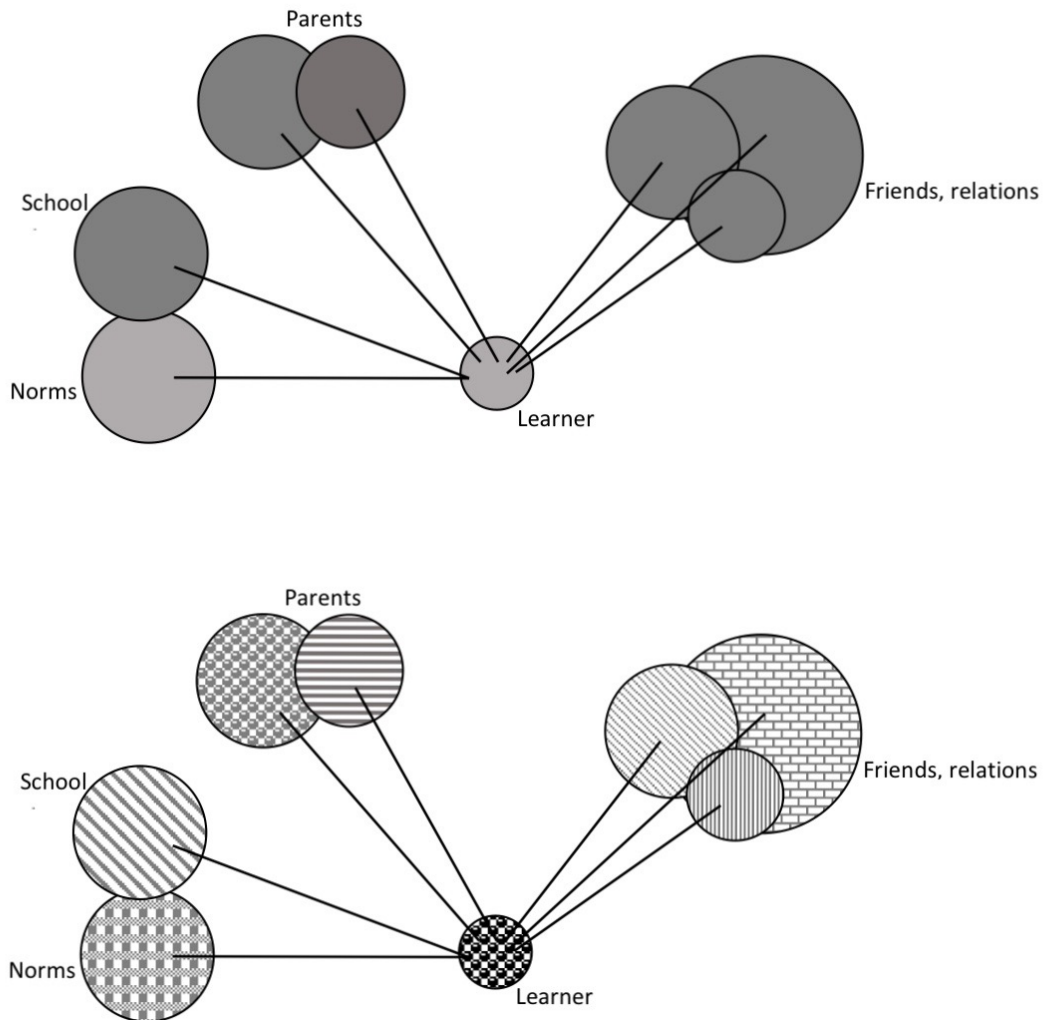


Figure 4 - Multilingual feature transmission according to Ansaldo (2009) Note the more complex patterns of shading in the second model compared to the first, which represents the more complex structure of a multilingual linguistic environment for the language learner (model adapted from Ansaldo, 2009 for better visibility of the labelling).

A collection of sociolinguistic research has applied the idea of a feature pool to studies of emerging English varieties. Schneider (2007, p. 8) bases his dynamic model on Mufwene's theory of the feature pool and underlines that the idea of only one "standard" version of English being transplanted to a colonial setting is misguided. Postcolonial Englishes therefore all came into contact with many competing dialects of English and the choice of features was vast.

Gonzales (2017, p. 84) applies the idea of a feature pool to the multilingual context in the Philippines that lead to the emergence of Philippine English as a distinct variety. The English that initially emerged in the region of Iloilo included a feature pool highly influenced by the substrate languages Hiligaynon or Ilonggo. Although the Philippine national language of Tagalog later came to play a more significant role, a strong influence of those substrate languages are still seen in Philippine English today.

In his corpus analysis of noun phrase constructions in Singaporean and Kenyan English, Brunner (2014) provides detailed accounts of the substrate language feature pools available to those regions. He concludes that head-final noun phrases are highly frequent in the Singaporean feature pool and therefore likely to be adopted by speakers, while head-initial structures are "less likely to win the competition and are therefore selected less frequently in the variety of English spoken in the region" (p. 42). In Kenya, the feature pool shows a greater frequency of head-initial noun phrases and, again, following the principle of the feature pool, they are more likely to be adopted into the English variety of the region.

2.1.2.7 *Variation or Mistakes?*

The concept of the feature pool gives the impression that the adoption of innovative language features is an un-problematic characteristic of language change. It disregards in many ways the social context and especially the stigmatization in which this change often takes place. In reality, the celebration of innovative dialect or language features stands in stark contrast to more traditional language ideologies that foresee a standard language as the correct way of speaking and allow for only limited possible variation. This ideology is often pushed by an elite that potentially employs more standardized speech, while less standard speakers don't get the same power over what language ideals a society strives for. Consequently, many of the regularly used features of newly emerging Englishes are interpreted as *mistakes* rather than *variation*. To give an example of this; in a public presentation about the emergence of and variation in Guam English that I gave in front

of a larger crowd of academics and non-academics in Guam, I had pointed to widely represented features of Guam English that are found in both younger and older generations and contribute to Guam English being a variety that is distinct from other regional or standard American Englishes. One feature that I mentioned was of a phonetic nature, namely the less aspirated realization of the voiceless stops /p/ and /t/. After my presentation, one of the first comments I received from a member of the audience was that he was under the impression that Guam English speakers simply did not know the difference between the letters *p* and *b* as well as *t* and *d*, and that this would explain their lack of aspiration in the pronunciation of those letters:

Member of the audience: “Is it possible - I know it is possible that the language, English, [in] oral traditions *p* and the *b* are the same and the *t* and the *d* is the same. Can you elaborate on that?”

Eva Kuske: “Uhm, okay, so that *p* and *b* are the same? As-“

Member of the audience: “[You] don’t even know that they’re different letters. If you- say I had to [...] in nineteen forty, the *p* and *d*, uhm, *p* and *b* are different letters- *d* and *t*”

Eva Kuske: “You think that’s the case? That people don’t know the difference between the letters?”

Member of the audience: “I’m guessing it’s the case, but- I have a dog and his name is [Deets]. And I can never tell them that I’m not saying [Teets].”

Eva Kuske: “Uhm, it’s one option that people don’t know that there’s different letters but it’s very possible that the pronunciation is just the way it is- so that there is voicing and devoicing and that happens in highly educated people, it happens in many varieties of English, mhm.” (Micronesia Publishing, 2018)

Conversations like the one exemplified above are common in the dispute about language variation versus a standard “correct” language as a point of reference. They illustrate the ambivalence between recognition and acceptance of non-native norms as they continue to fall short in comparison to native standards. Bamgbose (1998, p. 2) summarizes the issue as follows: “The main question with innovations is the need to decide when an observed feature of language use is indeed an innovation and when it is simply an error [...] If innovations are seen as errors, a non-native variety can never receive any recognition.” To refer back to the conversation with a member of the audience at my presentation, one can see that an endonormative standard in ESL regions is far from being broadly accepted, perhaps particularly in the eyes and ears of L1 speakers of a more standard variety.

One of the most famous historic debates about the difference between language mistakes and variation is the Oakland Ebonics Controversy. The debate about recognizing African American English (then referred to as “Ebonics”) as the primary language of African American children in the Oakland educational system caused a heated public debate (Rickford, 2002). Many of the arguments were deeply rooted in the unclear distinction between mistakes versus language variation. As stated in Wolfram (1998), people arguing against the legitimacy of AAVE as a linguistic system based this on a black and white idea of right and wrong ways of speaking. To underline this, Wolfram cites a radio host that argued: “You have to understand, Professor, that I believe in a right and a wrong, a moral and an immoral, a correct and an incorrect and Ebonics is simply incorrect English.” The counterargument from the standpoint of the sociolinguists was that AAVE is not a collection of English mistakes but instead an ethnic dialect that underlies a clear linguistic system. The resolution that was finally passed by the American Association for Applied Linguistics (1997) mainly argued that the American education system ought to inform students about linguistic diversity.

A call for the inclusion of second language acquisition in the discussion of new Englishes also comes from various sociolinguists studying world Englishes. Sharma (2005), for example, argues for a more narrow space between second language acquisition and native variation studies, in order to include language change in multilingual settings in a more integrated way. She argues that there is evidence for a clear distinction between language innovations and individual second language errors, but that this is dependent on the language feature: In analyzing Indian English speakers in the U.S., she found that some non-standard variables, namely *past marking*, *copula use* and *agreement*, may be categorized as second-language learning elements. Other elements, such as *articles*, appear to be a stable non-native feature shared by a larger group, even by those that otherwise show very standard elements in their speech. This is evidence for what she terms “indigenized non-native varieties of English” (NNVEs). NNVEs fit in neither with the definition of ESL Englishes, nor are they simply a variety of a native English, but they appear to show elements of both. Buschfeld (2014) also argues against the separation of learner language from second-language varieties of English or World Englishes. She claims that many of the objects of inquiry overlap and the psycholinguistic process for the development of ESL and EFL are fundamentally similar.

Cheshire, Kerswill, Fox and Torgersen (2011, p. 171) quantify the individual language learner in their research on Multicultural London English (MLE). The term “group second language learning” describes an entire generation acquiring the host language. For MLE speakers in their study, a native English model is not available to the language learners at home, as their caregivers come from a different linguistic background. L2 English speakers of the younger generation learn the host language, English, outside of the home and base their linguistic model on someone other than their caregivers. Something similar may have happened in earlier stages of the emergence of English in Guam, as will be discussed in a later section (c.f. *Chapter Two – Socio-Historic and Linguistic Context*). Chamorros were taught English in schools, but at home the language model was still mainly Chamorro. The initial English speaking generations in Guam therefore may fall under Cheshire, Kerswill, Fox and Torgersen’s definition of group second language learners with the exception that in the case of Guam, Chamorro was originally the dominant language whereas in London, English had always been the dominant language.

What defining factors are necessary to categorize a newly emerged variety of English as a legitimate, endonormative dialect, rather than a variety riddled by mistakes? A common denominator of regional Englishes is the existence of systematicity in the variation. They show evidence of a grammatical sub-system that explains variables as an organized and not a random entity of the language or dialect. Finally, this language system is distributed widely in the speech community (Weinreich, Labov, and Herzog, 1968; Sharma, 2005). In order to define language innovations as such and dismiss the idea of a simple language mistake, Bamgbose (1998, p. 3) asks the following questions: “How many people use the innovation? How widely dispersed is it? Who uses it? Where is the usage sanctioned? What is the attitude of users and non-users to it?” In answering that, one gains information on the “demographic, geographical, authoritative, codification, and acceptability factors” (p. 3) of a language. Finally, one needs to keep in mind that many speakers are in fact able to change their speech styles between innovative and more standard forms. This functions as another indicator that a non-standard variation is not constrained to a lack of knowledge about the standard system but instead carries social meaning.

2.1.3 American English Influence on World Englishes

As Englishes developing out of a colonial context were most commonly influenced by either American or British English, comparison with one of these two standard varieties is tempting. At

this point, there is still a gap in linguistic research on Englishes emerging out of contact with the U.S. as a colonial power, and only few varieties have been compared to American English as a superstrate language.

Philippine English is one variety that emerged out of contact with the U.S. as a colonial power. Scholars of Philippine English find a clear difference in the language profile of this variety compared to other post-colonial Englishes (Llamzon, 1997; Regala-Flores, 2016; Tayao, 2004). Many of the distinct features can be traced back to American English influence. Schneider (2007, p. 140) explains this with the Americans' political strategy in the colonies: "The Americans were quick and radical in their decisions on the future course of the country, judging their own culture and language superior to the indigenous ones." With this strategy, and by making English the official language and main language of instruction in schools (Sibayan & Gonzalez, 1996, p. 139), American English quickly became the only target variety for the people in the Philippines. Additional factors were exposure to American media in the forms of music, movies and news reports (Regala-Flores, 2016). Tayao (2004) refers to American English as the "matrilect", i.e. the mother variety of Philippine English, and others even consider Philippine English to be a variety of American English (Llamzon, 1969). Many phonological similarities to the matrilect are listed, such as the ability to produce ten distinct vowel sounds (Regala-Flores, 2016), as opposed to the previously assumed smaller set of three vowels (Tayao, 2004; Llamzon, 1997). Gonzalez, Jambalos and Romero (2003) further note the use of schwa in unstressed syllables to be a result of American English influence. In fig 5, Tayao (2004) lists Philippine English vowels in comparison to the American vowel set (in fig 5 referred to as "gAmE Phonemes") and notes that for the acrolectal group, i.e. the most standard speakers, all vowels resemble the superstrate, with the exception of PALM, which is produced lower and further back. The mesolectal and basilectal groups show more local features that assumingly come from Philippine substrate languages as a counter influence to American English (Tayao, 2004, p. 1058). Llamzon (1997, p. 43) additionally notes a "lack of nasal twang" and a "refusal to use the 'reduced signals' of the informal conversational style of American English" as features that are not shared with American English by most social groups of Philippine English speakers.

gAmE Phonemes	PhIE <i>Acrolect</i>	PhIE <i>Mesolect</i>	PhIE <i>Basilect</i>	Substitutions
High				
Front				
/i:/ 'fleece, near, feel'				
/ɪ/ 'kit, pin, fill, happY'		free variation with [i:] –		(i)
Back				
/u:/ 'foot, cure, goose, pool'				
/ʊ/ 'pull'		free variation with [u:] –		(u)
Mid				
Front				
/eɪ/ 'face, fail, square'			–	(i)
/ɛ/ 'dress, fell, pen, merry'			–	(i)
Central				
/ə/ 'commA'		free variation with [ɑ] –		(ɑ)
/ʌ/ 'strut'			–	(ɑ)
Back				
/oʊ/ 'goat, goal'		free variation with [o] –		(u)
/o/ 'cloth, thought'			–	(u)
Low				
Front				
/æ/ 'trap, bath, dance, hand, marry'		[ɑ] in 'bath' versus [ɛ] in 'cat'	–	(ɑ)
Central				
/a/ 'lot, palm, start, power'	[ɑ] is low back			

Figure 5 - PhIE vowel production in comparison to General American English, according to (Tayao M. , 2004, p. 1051)

Brunei English, described by Deterding (2014), may present another example of an English variety that shows traces of American contact. The British made up the main English speaking colonial involvement and, until recently, mostly teachers from Britain, Australia and New Zealand make up the English-speaking expat community in the region. However, Deterding finds rhoticity in Brunei English, despite the non-rhotic Englishes being present on the island. He theorizes that this could be the result of American media influence. His theory would give the influence from modern media greater weight than the interaction with people present in the country⁷.

⁷ This is only one possible explanation for the presence of rhoticity in Brunei English. Deterding (2014) also suggests that Malay, which is the L1 language in Brunei, could be an influence. Many other features found in Brunei English simply reflect an emerging global English. In fact, the impact of media influence on language change is still subject

American media influence is also said to affect the Englishes spoken in several regions around the world. In a study by (Bayard, Weatherall, Gallois, and Pittam, 2001), over 400 students from Australia, New Zealand and other regions were asked to rate male and female voices with New Zealand English, Australian English, American English and RP-type English accents. The listeners rated American female voices as most favorable on several personality traits (eg. friendly, assertive, cheerful). The overall positive ratings of American English voices is assumed to be a result of the growing presence of American English in the media.

The American influence on Australian English has resulted in a number of linguistic adoptions. Sussex (1989) and Taylor (1989) both provide extensive lists of American influence in various linguistic categories, such as lexis, phonetics, morpho-syntax, as well as stress and intonation. To name only a few, the words *apartment* (as opposed to *flat*), *flashlight*, *French fries* and expressions such as *freak out*, *rip off* and *take care* are all considered adoptions from American English. Sussex (1989) and Peters (2014) both stress that this development mostly happened as a covert process, where speakers have become accustomed to an American English lexical repertoire without clearly noticing it as such. This is indicated by Peters' (2014, p. 120) finding that only 35% of young Australians (10-24 years old) categorize *guy* as sounding American, whereas older Australians (65 years or older) still consider it an American word (73% of study participants). *Guy*, which is assumed to have been borrowed from American English in the 1980s, therefore has become neutralized, meaning that it is no longer considered to be noticeably American by younger Australians. There are also a number of reported phonetic features in Australian English that are likely influenced by American English, such as the increasingly more widespread use of the American pronunciation of *schedule* (/ˈskɛdʒʊl/, as opposed to British /ˈʃɛdju:l/) or *progress* (/ˈprɒˌɡres/ as opposed to British /ˈprəʊgrəs/) (Taylor, 1989). As an example of an American morpho-syntactic feature, Sussex (1989) and Taylor (1989, p. 231) discuss the distinction of *gotten* and *got*, which is a feature less common in British English and more so known as an American development. The past participle of actional *get* (“obtain, become, arrive” (p. 231)) in American

for debate and a considerable number of linguists argue for the importance of face-to-face contact as a trigger for phonological and syntactical change (c.f. (Sayers, 2014) for a more in-depth portrait of the on-going debate).

English is *gotten*, whereas the past participle of statal *get* (“have, possess” (p. 231)) is *got*. This distinction is increasingly noticed in Australian English. Regarding stress pattern, there is also a noticeable shift reflecting American patterns: *cigarette* is increasingly stressed on the first syllable, as opposed to the final syllable, which is associated with a British pronunciation (Sussex, 1989). Taylor (1989, p. 229) also reports a stress shift in adverbs transformed from adjectives ending in –ary. The stress has moved from a primary position to the antepenultimate (see *fig. 6*), which he assumes to be a result of American influence. Suggested reasons for this development are mainly based on linguistic influence through popular songs, the media and advertising, but also because the transfers often lead “to save time or space, to greater systematization, to the filling of semantic gaps, or even to greater stylistic freedom” (Taylor, 1989, p. 253). Though the American influence is thoroughly reflected on, many of the researchers conclude that intonation, rhythm, and vowel quality have remained distinctly Australian, and that Australian English appears to be “immune to North American infiltration” (Sussex, 1989, p. 159). Instead, the newly borrowed features are “Australianized” (Peters, 1998).

adjective	adverb	
	(BE)	(AmE)
<i>voluntary</i> /'vɒlənt(ə)ri/	<i>voluntarily</i> /'vɒləntərəli/	/,vɒlən'tərəli/
<i>primary</i> /'praɪm(ə)ri/	<i>primarily</i> /'praɪm(ə)rəli/	/,praɪ'mərəli/
<i>secondary</i> /'sekənd(ə)ri/	<i>secondarily</i> /'sekənd(ə)rəli/	/,sekən'dərəli/
<i>necessary</i> /'nesə,seri/	<i>necessarily</i> /'nesəs(ə)rəli/	/,nesə'sərəli/
<i>or</i> /'nesəs(ə)ri/		

Figure 6 - Stress shift reflecting Americanization in adverbs transformed from adjectives ending in –ary (Taylor, 1989, p. 229).

Recent research argues that Bermudan English, spoken on the British island territory of Bermuda, could be considered a North American dialect, based on their many phonological similarities (Trudgill, 2019). Among others, an unrounded LOT vowel, intervocalic t-voicing and flapping, and diphthongization of the short front vowels KIT (/i^ɪ/), DRESS (/e^ɪ/) and TRAP (/ɛ^ɪ/) are listed. Particularly the diphthongization is evidence to group Bermudan English with the variety of American English spoken in Charleston, South Carolina. This is further evidence that a large number of World Englishes are showing American English influence.

Researchers also cite studies in Sweden and the Netherlands which show similar results: A rise of positive attitudes toward American English as opposed to RP, and a general development

toward more frequent use of American English lexis and phonology (Bayard, Weatherall, Gallois and Pittam, 2001; Mobärg, 1999; Haagen, 1998; Bayard and Sullivan, 2000a; Bayard and Sullivan, 2000b). The researchers conclude that positive ratings of American accents “reflect a bowing to the inexorable pressure of American global hegemony in all its guises: fast foods, pop music, films [and] middleclass TV sitcoms [...] it seems clear that what we are seeing here is just part of the globalisation of world media based on American models - a *Pax Americana* which will continue for the foreseeable future” (Bayard, Weatherall, Gallois and Pittam, 2001, pp. 41-44). It seems, therefore, that a general assimilation toward American English is not only a consequence of colonialism, but perhaps more so a result of an American omnipresence in pop-culture, the media, advertisement and sports.

2.1.4 *American English: The Moving Target*

Comparing newly emerging varieties of English to a “standard” (American) English might be the wrong approach. Mesthrie (2006, p. 277) notes that, first of all, the influential standard Englishes during the colonial period were different from today’s norm-giving Englishes and a comparison to today’s idea of the norm would therefore be misleading. Secondly, there was never just *one* superstrate influence on English learners. Among many, Mesthrie names sailors, soldiers, divers, schoolteachers and tradespeople as influential groups who communicated with the indigenous people in non-standard English varieties and most likely all shaped the newly emerging standard in different ways. As we will see in the case of Guam, all the above mentioned groups were and still are present on the island and interacting with the locals. Mesthrie (2006, p. 277) cautions that “the notion of a target language (TL) is an idealization; more often, and certainly outside the classroom, the TL was a varied and ‘moving’ target. It is safe to assume that very few of these introducers of English held MA certificates in TESOL.” With this comment, the scholar quite accurately reflects on the variation that is present in the wrongly assumed to be homogenous superstrate Englishes. Based on his argument, it is essential to consider the various social groups and their regional origins when discussing the emergence of new Englishes, as they may explain the linguistic features that are found in those varieties.

As will be discussed in more detail in the next chapter, the U.S. has played a significant role on the emergence of English in the research site, Guam, but it was not only a standardized language

that the locals came in contact with in school and the media, but also regionally diverse American dialects spoken by the people that settled on the island or the people that the islanders came in contact with as they travelled to their preferred regions on the American mainland. When discussing emerging Englishes and the influence that American English has had as a result of the U.S.'s colonial power, features of newly emerging Englishes are generally compared to a standard American English variety. As argued above, however, one ought to consider the variation within this language rather than considering it as a whole.

Focussing on phonetic and phonological features, Labov, Ash and Boberg (2006) discuss 12 main dialect regions with their respective subordinate regions (see fig. Figure 7) that show distinct variation. Apart from a small group of African American informants, they do not comment much on ethnic variation, which would add even more variation to the picture. Additionally, the West is described as a relatively large dialect region and may show much more internal variation, as I will discuss in *section 2.1.4 - American English: The Moving Target*. In addition to being divided into various geographic dialect regions, varieties spoken in these regions have not been stagnant. Several language changes, including mergers and chain shifts, are taking place and continue to spread across North America.



Figure 7 - Dialect regions according to Labov, Ash and Boberg (2006)

The U.S. varieties most relevant to the study of English in Guam are the American West, specifically California, Washington, Hawai'i and the American South. The regions are relevant because Guam residents migrate to the mainland U.S. as well as Hawai'i regularly and therefore are in regular linguistic contact with those regions. As summarized in fig. Figure 8, they most often migrate to California, which may be due to its relative geographic proximity or because of a somewhat similar island culture lifestyle. It is also a target destination to seek medical treatment and to attend higher education. Additionally, larger groups of Guamanians and Chamorros migrate to the states of Washington and Texas (Census Briefs, 2010, p. 18). This may be due to work opportunities in and outside of the military, as well as long-standing family ties in the region. Additionally, many of my study participants travel to Hawai'i for the same reasons. The varieties that the islanders come in contact with in the respective U.S. regions may have an influence on the dialect that the migrants eventually bring back to the island of Guam. This could especially be the case in situations where the social network ties between a group living in Guam and relatives or friends living on the U.S. mainland remain strong. If communication - even if it is only over Skype - happens frequently, it is likely that the islanders will pick up linguistic patterns of their social network residing on the U.S. mainland and with that adapt to U.S. regional norms.

For that reason, I will devote the last section of this chapter to dialect descriptions of the most relevant U.S. varieties. Apart from a short general overview of each dialect, I will focus mostly on findings concerning the short front vowels, as this feature will be the focus of the quantitative analysis of Guam English. I will also put a special focus on the short front vowel production of relevant ethnic varieties, as an assimilation to U.S. ethnic minorities may have shaped the language of the indigenous group in Guam most prominently (c.f. *Discussion and Conclusion*). There is a wide range of linguistic research available on this set of vowels due to ongoing regional shifts occurring in many of the here discussed areas. This further justifies the choice to focus on this feature in the quantitative analysis of Guam English, as it will later allow for a comparison of the English variety in focus with those described in the following section.



Figure 8 - Percentage distribution of Guamanians and Chamorros residing in the U.S.
(Census Briefs, 2010, p. 18)

2.1.4.1.1 The American West

In the previously shown dialect categorization by Labov, Ash and Boberg (2006), the West is presented as the largest dialect region. While the authors certainly caution the reader that this is in no way an entirely homogenous region, the available phonetic dialect information on the West is scarce. The two main features that seem to make up “the West” are the low back merger (distinguishing it from the North and South) and the fronting of GOOSE but not GOAT (distinguishing the region from the Midland, where both are fronted). Due to the historic settlement of Northern, Midland and Southern residents in the West, some remnants of other dialect features are also noted, such as the glide deletion of PRICE before a voiced environment, which Labov, Ash and Boberg (2006) note in some speakers. To provide more detail on the West, a few regions are highlighted here, namely the ones that function as a likely target dialect region for Guam English.

2.1.4.1.1.1 California English

The English variety spoken in the California region may have an effect on Guam English and therefore deserves a closer description. The state of California is the continental U.S. region that is closest to Guam and frequently visited by Guam residents. Additionally, almost a third (30.1%) of Guamanian Chamorros living in the U.S. are living in California (Census Briefs, 2010). The informants in the current project report that it is the similar lifestyle and often a social connection (a relative might already be living there) that draws them to California.

One of the most well-documented phonetic characteristics of California English is the California Vowel Shift (Kennedy and Grama, 2012), also sometimes referred to as the Canadian Vowel Shift. In the front region of the vowel space, there is an on-going counterclockwise rotation of the front and low vowels KIT, DRESS and TRAP for both Caucasians and other ethnic groups, which is led by women. White California English speakers show a nasal pattern, in which TRAP diphthongizes and raises before nasals, but other occurrences of TRAP are lowering and backing. Other ethnic groups, for example Chicanos, don’t follow the same pattern. Instead, there is backing of TRAP in all phonetic environments without a clear nasal pattern and KIT is raised to FLEECE in the apical variant of (ING) in Chicano English (Fought, 2003; Eckert, 2008).

Other vowel changes affected by the California Vowel Shift are centralization of GOAT⁸ and fronting of the back vowel GOOSE, the latter of which results in the rather well-known stereotypical surfer exclamation of “dude”, which sounds more like “[dyd]” (Eckert, 2008, p. 29). Other ethnic groups in California are lagging behind in this development. Fought (1999) finds fronted GOOSE vowels in the speech of Los Angeles area Chicano English speakers but limits the finding to youth-based subcultures. Hall-Lew (2009) finds fronting of high and mid back vowels to be present in both European American and Asian American speakers, but she finds that for the Asian community, the younger speakers are leading this change, suggesting that this is a newly emerging feature.

Further findings in the back vowel region are the merged LOT and THOUGHT vowels moving closer to LOT. This feature is one that is shared by both the Caucasian as well as ethnic groups in California (Santa Ana & Bayley, 2004).

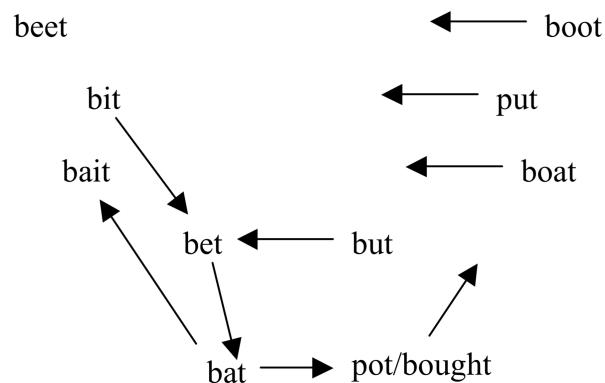


Figure 9 - The California Vowel Shift (Eckert, 2008)

2.1.4.1.1.2 *Washington State English*

Though Labov, Ash, Boberg (2006) do not clearly distinguish the Washington region from other parts of the American West, they do stress that the region showed considerable dialect mixing. The dialect of the Pacific North West is still considered “young”. Settlement there only dates back to 1850, with speakers coming from the Midwest, New England and the American South (Beckford

⁸ Labov, Ash and Boberg (2006) do not include the centralization of GOAT as characteristic of California English, while Kennedy and Grama (2012), in a more recent paper, do.

Wassink, 2016). Dialects from those regions are assumed to be the donors for many of the features found in Washington. Reed (1965), for example, considers the dialect to be similar to southern Illinois and Iowa. Early descriptions mention *r*-insertion in words such as *squash* and *wash* for as a most notable feature.

The most recent and most extensive description of Washington vowel production comes from Beckford Wassink (2016). She lists fronting of GOOSE, merging of LOT and THOUGHT, and pre-velar raising of TRAP and DRESS as the main ongoing developments of the region. Particularly the patterns found for TRAP is crucial, as this distinguishes Washington from the above described California region where it is generally retracted and only raised in pre-nasal environments by Caucasian speakers. Similarly, there seems to be no lowering of KIT and DRESS which is found in both Canada (Clarke, Ford, & Amani, 1995) and California. Beckford Wassink (2016) did find GOOSE-fronting but no GOAT-fronting in her study of Caucasian Washingtonians. Her study of Washington State vowel productions is particularly valuable for this study, as she includes several ethnic groups (fig. Figure 10): For African Americans, she notes LOT and THOUGHT to be nearly merged, but more separate than in any other ethnic group. She finds no fronting of GOOSE in this ethnic group, but a participation in pre-velar raising of TRAP. DRESS in pre-velar environments shows distinct pronunciation from DRESS in pre-voiceless obstruent environments, which sets African Americans apart from their Caucasian counterparts but not from other ethnic groups in the region who also follow the same pattern.

Japanese Americans show similar patterns as Caucasians: LOT and THOUGHT are completely merged, GOOSE is fronted and pre-velar raising of TRAP is present, as well as a slight raising of pre-velar DRESS. Finally, Mexican Americans are said to have the LOT/THOUGHT merger but not GOOSE fronting. They do find pre-velar raising for both TRAP and DRESS, with females leading both changes. The latter is a particularly interesting finding, as a backed production of TRAP and a continuous retraction of both TRAP and DRESS is found in the ethnic speakers of California, to which, as I will discuss at a later point, I assume Guam English speakers may be more likely to assimilate to.

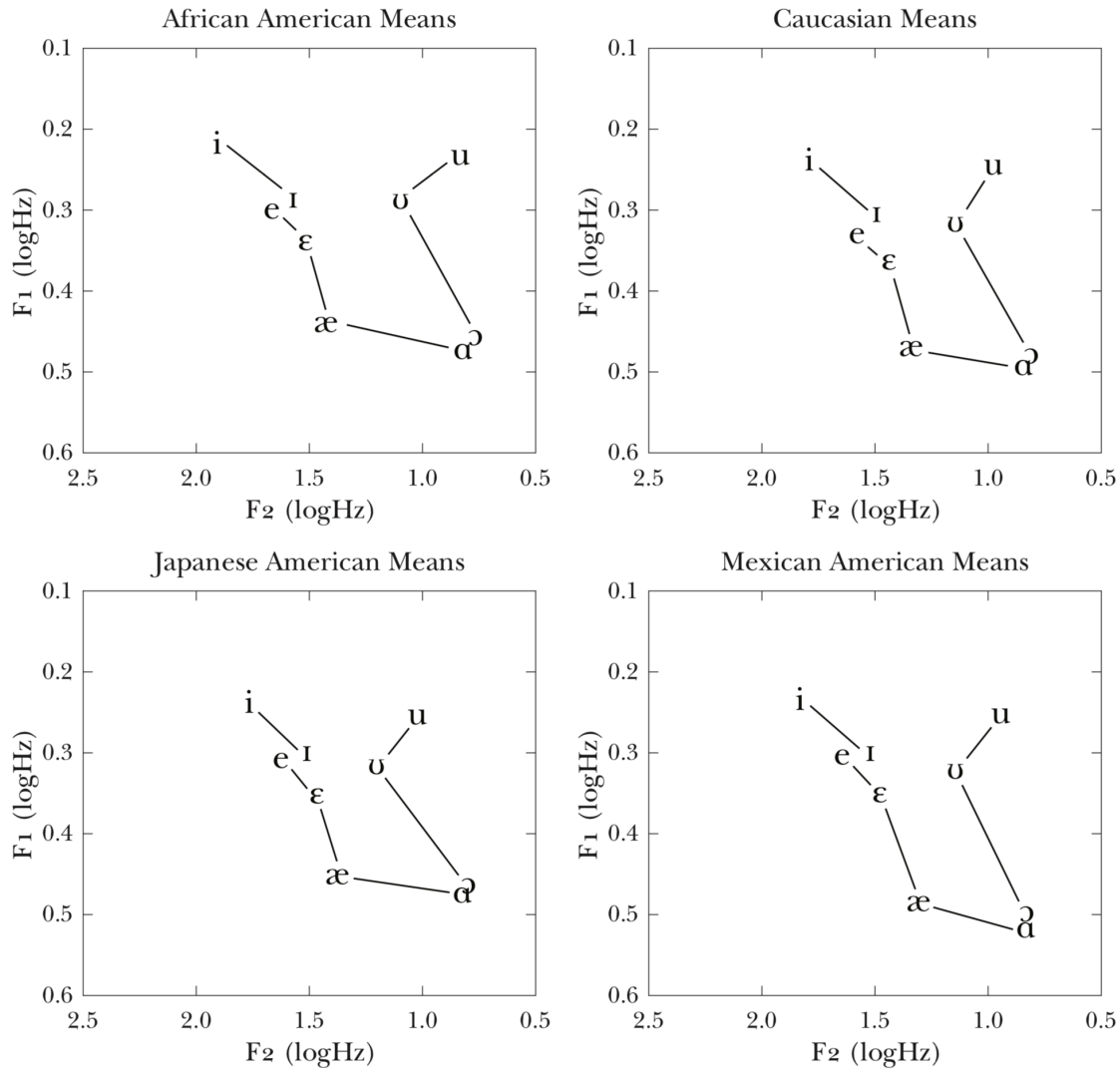


Figure 10 - Normalized vowel plots of male and female Washingtonians of four ethnic groups; African American, Caucasian, Japanese, Mexican, as presented by Beckford Wassink (2016, p. 91). Pre-velar environments of DRESS and TRAP were not included in the plots.

2.1.4.1.1.3 Hawai'i English

Though not part of the continental U.S. West, Hawai'i may well be an extension of the West, judging by its many shared dialect features. Hawai'i is one geographic location that is visited frequently by Guam residents: The state of Hawai'i represents the closest point between Guam and the U.S. mainland. Based on the feedback from my informants, it is likely to be visited for medical procedures that are not available on Guam, for tertiary education, to visit family, or for recreational reasons. Perhaps for many of those reasons, there is a social connection between Guam

and Hawai'i, which may also influence similar language developments in the two locations. As will become clear in the quantitative vowel analysis of Guam English, it is particularly the changes that are happening in the short front vowels that seem to follow a similar pattern. To allow for comparison in the Discussion Section of this thesis, I will present the linguistic profile of Hawai'i English in more detail here.

Hawai'i English is in itself not homogenous. In the literature, there is a distinction between three main terms that are used and reported most frequently, namely Hawai'ian Creole, Hawai'ian Pidgin and Hawai'i English. (Reinecke & Tokimasa, 1934) define the Pidgin as a language with vocabulary drawn from one language and syntax, likely simplified, from another. It developed out of communication between native speakers and traffickers. They ascribe a more negative connotation to the Creole, which they deem associated with "a dependent, often servile, class" (p. 49). They assume that Hawai'i English developed out of the Creole, in imitation of the American Standard. Drager (2012) does not make a distinction between a Creole and a Pidgin in Hawai'i. She considers the two as synonyms for the same variety and focuses more on the demarcation of it to Hawai'i English. She also claims that people can - and frequently do - codeswitch between the two. Many scholars agree that the difference between Hawai'i English and the Creole ought to be regarded as a continuum (e.g. Reinecke and Tokimasa, 1934; Odo, 1970; Reynolds, 1999). Both varieties are stigmatized and carry low prestige on the islands. To exemplify the negative language attitudes, Drager (2012) describes an incident where two reporters sued the National Weather Service for hiring less experienced professionals with a standard accent rather than local professionals with a regional accent. The court eventually agreed with the National Weather Service, indicating that local language features are in fact disfavored in media reporters.

The focus here will be put on Hawai'i English, rather than the Creole or Pidgin forms, mainly because this will facilitate comparison to Guam English, which is not considered either a Pidgin or Creole (Quan, 2010). Descriptions of Hawai'i English are mainly concerned with pinpointing shared features among the speakers, describing its most salient features and, to some extent, tracking down variation in the language that may be driven by social factors.

Regarding the short front vowels, KIT and FLEECE are clearly distinguishable vowels in Hawai'i English, sets the variety apart from the regional pidgin. There is a gender difference reported in

the pronunciation of KIT. Young males produce the most retracted values of KIT, followed by young females⁹. TRAP is realized in a low and back position before both oral and nasal consonants and no nasal split is evident (Kirtley, Grama, Drager, and Simpson, 2016). TRAP retracting appears to be ongoing, as it is found in an even lower and backer position in younger speakers (Drager, Kirtley, Grama, and Simpson, 2013). DRESS is also found to be lower and backer, with gender being a significant predictor for the vowel production. It is again the male speakers that show a more retracted quality of the vowel. The retraction of the short front vowels suggests Hawai'i's participation in regional vowel shifts that may follow the pattern of the California vowel shift. However, evidence against this possibility is presented by Drager, Kirtley, Grama and Simpson (2013), who find that the social constraints for the production of the short front vowels are not dependent on age but rather on gender and whether or not a person speaks pidgin.

Other salient vowel features reported for Hawai'i English are the use of full vowels instead of schwa (t[u]day), monophthongization of FACE and GOAT, and the vocalization of syllable-final /r/ e.g. [k^hɑ] 'car' (Sato C. , 1993). As for the diphthongs, FACE is reportedly realized as a monophthong word-finally, as well as word-initially in a pre-voiceless consonant position (Drager, 2012, p. 66). GOAT has a similar monophthongal quality. These monophthongal qualities are not uncommon in other regions of the U.S., where they are attributed to places that have had high numbers of second language speakers (Thomas, 2001). Kirtley et. al. (2016, p. 12) present trajectories of all vowels based on their collected spontaneous speech data in fig.Figure 11, illustrating the above described features.

⁹ Kirtley, Grama, Drager and Simpson (2016) found that the ability to speak Pidgin may also have an influence on the production of KIT in Hawai'i English.

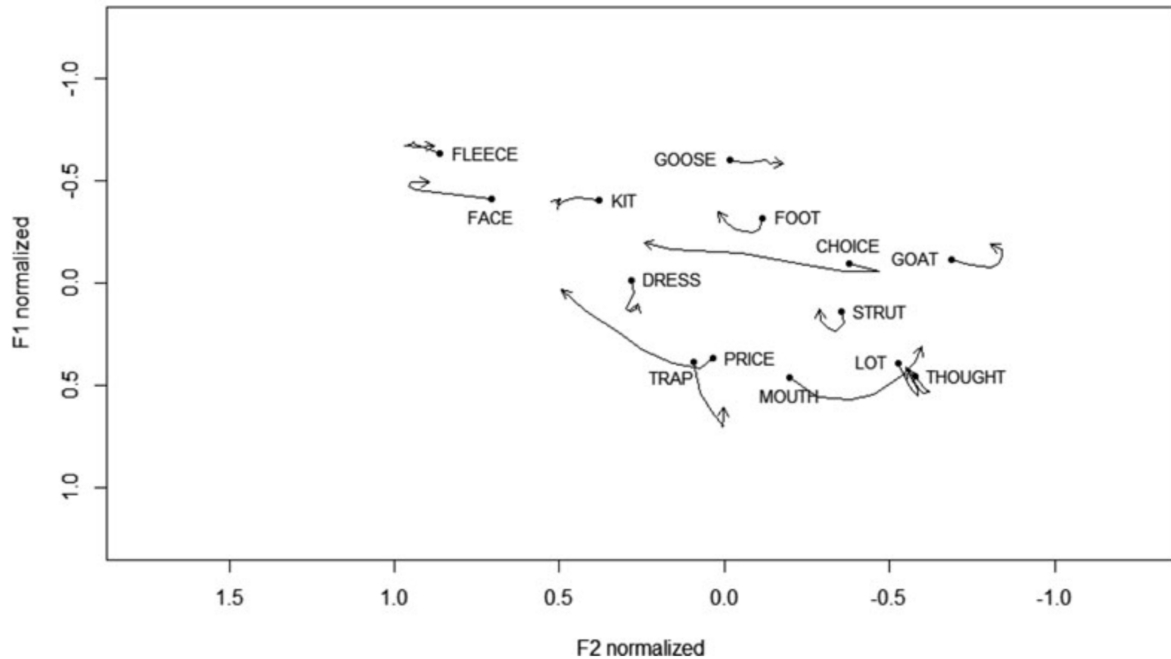


Figure 11 - Hawai'i English vowel trajectories based on Kirtley et. al. (2016, p. 12). The measurements are taken from spontaneous speech data, at "equidistant points within the vowels' durations."

2.1.4.1.2 *The American South*

The Southern region is linguistically described as a rather large region (Labov, Ash, and Boberg, 2006). One of the main language features that distinguishes the South from other regions is the Southern vowel shift. As modelled in fig. 12, it consists of the fronting of the back vowels GOOSE (labelled as /u/ in the model) and GOAT (labelled as /o/ in the model); the raising and fronting of KIT (/ɪ/) and DRESS (/ɛ/) to the periphery of the vowel space and the lowering and backing of FLEECE (/i/) and FACE (/e/) to a central position. The former includes the merger of KIT and DRESS, which is commonly referred to as the PIN/PEN merger (Clopper, Pisoni and de Jong, 2005; Fridland, 2000, 2001; Labov, 1991, 1994; Feagin, 1986).

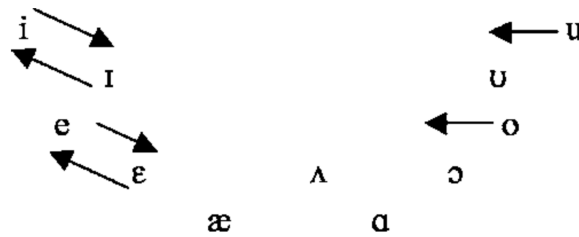


Figure 12 - Model of the Southern Vowel Shift (Clopper, Pisoni and de Jong, 2005, p. 1662)

Ethnic groups are expected to show different patterns from the White Southern community. African Americans, for instance, may not participate in some of the linguistic changes going on in the South, according to Thomas (1997) and Bailey and Thomas (1998). Fridland (2003), however, finds that, though African Americans seem to be converging to regional Southern dialects in regard to their vowels (emerging diphthongal DRESS and GOAT and shortened PRICE gliding), other linguistic features (final-consonant deletion, /l/ vocalization, /r/-lessness, and multiple negation) still create a clear ethnic group belonging.

It is important to point out here that the raising of DRESS ([ε] or even [eɪə] as in *bet* [beɪət]) and KIT is essentially a contrastive finding of what is reported for the California vowel shift. Findings in Guam English would give further information about which area the speakers are more likely to assimilate to regarding the short front vowels.

2.1.4.1.2.1 Texas

Almost 7% of the Chamorros and Guamanians living in the continental U.S. reside in the Southern State of Texas¹⁰. According to its geographic location, Texas English speakers participate in the Southern vowel shift. However, some findings show regionally specific patterns. In larger cities of Texas, for example, Gentry (2006) finds the dialect to be “too complicated” to simply be categorized as Southern English. Much variation is reported, most likely due to the influence of a variety of ethnic groups. In fact, Bernstein (1993) finds ethnicity, along with age and region, to be

¹⁰ According to (U.S. Census Bureau, 2001), approximately 60,000 Chamorros and Guamanians live in the continental U.S.

essential factors influencing language variation in the Texas area. The social factor *age* further suggests on-going sound changes in the region.

There are a number of Southern features that Texas English speakers do not participate in. Gentry (2006) reports the absence of PRICE and CHOICE monophthongization. She also notes that the rotation of the high front vowels FLEECE and KIT is also generally not found in Houston Texas English. She also reports LOT/THOUGHT merger which is not typical for the chain shift.

Merging of pre-nasal KIT and DRESS, i.e. the PIN/PEN merger, is not common among Anglo Houstonians. This long-standing feature of Southern American English is disappearing in the larger cities of the South (e.g. Tillery and Bailey, 2004). In a perception test, native listeners from the region generally associated this ascribed merged PIN/PEN vowels to older speakers, suggesting that it is in fact disappearing in the younger speakers (Koops, Gentry and Pantos, 2008). Gentry (2006, p. 1) concludes that “Houston is left hovering between the West and the South”. The Latin community in Texas does not show much divergence from the white population. In San Antonio, the second largest city in Texas, speakers with a Spanish language background were found to assimilate to the English spoken in San Antonio, suggesting that the White Southern dialect there enjoys a higher prestige than the ethnic variety (Sawyer, 1957 reported in Sawyer, 1959). Sawyer (1959) finds that both younger and older speakers with a Mexican background show Southern features in their speech. She also finds no Latin language features to be diffused to the Anglo community or even the bilingual Spanish/English community. The lack of vowel contrasts of KIT and FLEECE as well as GOOSE and FOOT, as well as the lack of non-Spanish phonemes such as TRAP and schwa, disappear as the English language skills of the speakers increase. Sawyer (1959, p. 278) concludes that “San Antonio regional English is the model toward which the Latin bilinguals strive, and as they increase in skill, they eliminate points of interference with their first language and come closer to the speech of the Anglo community”.

2.1.4.1.3 Summary of The Short Front Vowels in Regional American Dialects

Region/Vowel	<i>FLEECE</i>	<i>KIT</i>	<i>DRESS</i>	<i>TRAP</i>
California ¹¹	constant in high front position	retracting	retracting	retracting (nasal pattern for Caucasian speakers: pre-nasal fronting)
Hawai'i ¹²	constant in high front position	retracting	retracting	constant in low, back position
Urban Texas ¹³	--	lack of PIN/PEN merger	lack of PIN/PEN merger	--
The South ¹⁴	backing and lowering	raising and fronting PIN/PEN merger	raising and fronting PIN/PEN merger	constant, diphthongized (æ~ɛə ¹⁵)
Washington ¹⁶	--	constant	raising, including pre-velar environments (bɛg) (exception: AAVE speakers)	raising, including pre-velar environments (bæg)
The Philippines ¹⁷	merged KIT/FLEECE	raised, merged KIT/FLEECE	ɛ	ɑ

¹¹ (Eckert, 2008)

¹² (Drager, Kirtley, Grama, & Simpson, 2013)

¹³ (Gentry, 2006), (Tillery & Bailey, 2004)

¹⁴ (Clopper, Pisoni, & de Jong, 2005)

¹⁵ (Labov, Ash, & Boberg, 2006)

¹⁶ (Beckford Wassink, 2016)

¹⁷ (Tayao, 2004)

3 Chapter Two – Socio-Historic and Linguistic Context

This chapter presents an overview of the social history of Guam and a description of the linguistic background of the island. Guam's history is defined by its diverse colonial periods, each of which has influenced the island's community and its language significantly. The first colonial power to settle in Guam was the Spanish, who had an impact on the indigenous people's language, religion and cultural customs. In 1898, Guam became an American territory and has since then almost continuously been influenced by the U.S.; culturally as well as linguistically. The only exception was a brief Japanese occupation period during WWII, subsequent to which the U.S. resumed control over the island. Guam's political and cultural connection to the U.S. has remained close until the present, which is reflected in its political status, as a territory of the U.S. Most of the historic accounts discussed here come from Thompson (1947), Rogers (1995) and Carano and Sanchez (1964).

The connection to the U.S. is noticeable in the linguistic development of the island, as the indigenous population has moved from speaking Chamorro as a first language to a largely monolingual English speaking society. This process has happened over the course of only a few generations in recent decades, making Guam an ideal location to study ongoing language change in connection to the American colonial influence.

In the following sections, I will discuss the social history of Guam during the major settlement periods, i.e. the Ancient Chamorro period, the Spanish colonial period, the first American period, the Japanese period and the second American period. This includes a separate discussion of the education system and language policies in those periods. A description of the available media and social contact to the biggest diaspora communities in the U.S. will give further insight into the cultural development and assimilation toward the U.S. I will then take a closer look at the language situation on the island, describing the language shift from Chamorro to English, and providing overview descriptions of the most relevant languages and English varieties spoken on the island (Chamorro, Guam English, Philippine English and others), including the co-existing attitudes toward them.

3.1 *Pre-Anglophone Period*

3.1.1 *The Ancient Chamorros*

Guam was first populated by the Chamorros, descendants of Austronesian people. Very little is known about their origins. Some theorize that they traveled by canoe from the Asiatic mainland and the Philippines through the Western Carolines (Thompson, 1947), as they showed similarities to the Tagalogs in “language, customs and form of government” (Fritz, 2001, p. 13). The cultural customs and societal structure of the ancient Chamorros was very different from the rather Westernized culture of Guam’s indigenous people today. The ancient Chamorros lived in large so-called latte stone ([*lari stoun*]) houses, a characteristic architectural structure of the Mariana Islands, whose artifacts are still found today (c.f. fig. 15). Their diet consisted of the island’s fruits, such as breadfruit and coconut, sugarcane, roots and fish (Fritz, 2001). The Chamorros were experienced sailors of the *proas* (c.f. fig. 14), a distinctly shaped sailboat common to the Mariana Islands and were considered skilled fishers. The community practiced a predominantly matrilineal system, leaving women in charge of central decision making and passing down rights and privileges, for instance for land ownership. The social structure of the Chamorros was clearly divided into fixed hierarchies (c.f. fig. 15). The basic social unit was the extended family, however large it was, which belonged to different clans. The clans were led by the oldest male or female and could be divided further into higher and lower castes. Within those units, occupation and land ownership varied. People of the higher caste, also referred to as *Chamorri*, were often fishermen and sailors, and they lived along the coastline. People of the lower castes (the *manachang*), however, were restricted to farming and had no rights to land ownership. Accounts of this period suggest that the various castes interacted distantly, intermarriage between castes was not common and the lower castes were generally expected not to go near the higher caste’s property, but there are no accounts of slave-like treatment of the lower castes (Rogers, 1995, p. 36).

Within the family clans, knowledge about medicine and magic was passed down internally and kept secret from other parts of the Chamorro society (Rogers, 1995; Tolentino, 2018). Medicine and treatments were practiced by the *suruhānu* of the community, who relied on natural remedies to cure their patients. Some of those ancient recipes are still known today and practiced by the few *suruhānu* left in the community (Guampedia, 2015).

The ancient Chamorro belief system mainly revolved around Animism, the idea that everything in nature has a soul. Hence, the Chamorros worshiped their celestial ancestors Puntan and Fu'una, who were believed to have created the universe out of their own body parts (Champaco Mendiola, 2018). The belief in ancestral guidance and powers has remained in many Chamorros and is often practiced as a respectful way to honor their pre-colonial culture. During my fieldwork trip to Guam, informants often talked to me about their historical ancestors, the Taotaomo'na (meaning "those who came before"). Many closely follow traditions of highly respecting the land, such as by asking the Taotaomo'na for permission before entering the jungle. If someone suddenly falls ill or finds inexplicable bruising on their bodies, it is believed that one did not show the expected respect to the ancestors. Such traditions are remainders of the Chamorro culture that have been passed down despite centuries of colonial contact with Western belief systems and ways of life.



Figure 13 - A Chamorro hut, built on latte stones (illustrated by Alicia Yamaguchi, as found in Sanchez (1987, p. 3))

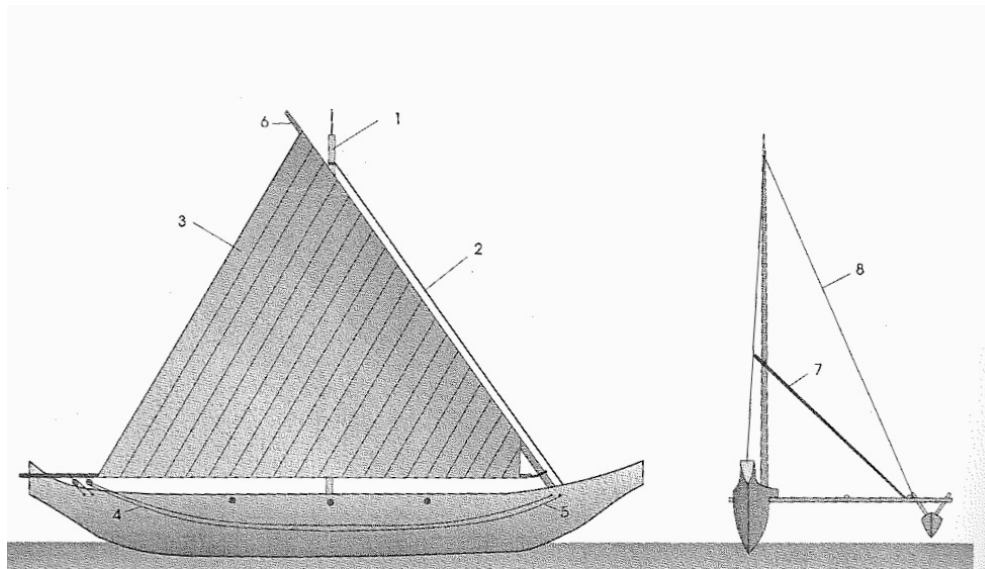


Figure 14 - Illustration of a Chamorro Proa (Rogers, 1995, p. 32) adapted from (Anson, 1748)

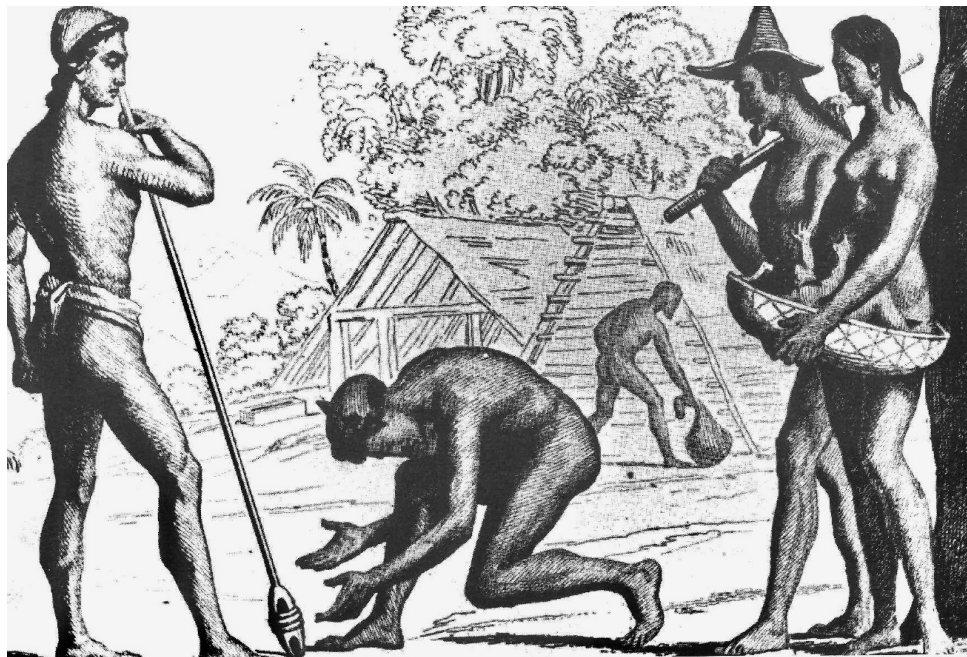


Figure 15 - Social hierarchy of ancient Chamorros: A Chamorro of the lowest social caste, the Manachang, is bowing down to a Chamorri or chief (illustration by Arago (1819), as found in Sanchez (1987, p. 10).

3.1.2 Spanish Colonial Period

Guam's first contact with the Western world was when Magellan and his seamen arrived in the Mariana Islands under the service of Spain in 1521. In the 15th century, both Spain and Portugal were on a quest to colonize the Pacific. Under the Treaty of Tordesillas, which was an agreement to divide the newly encountered lands amongst the two nations, Pope Alexander VI granted Spain the right to imperialize the region (Freeman, 2010). Magellan quickly named the island group "Islas de los Ladrones," islands of thieves, describing the inhabitants' seeming lack of a concept of personal possession. According to the reports of Pigafetta, an Italian explorer who had accompanied Magellan on his travels, the islanders simply helped themselves to anything that was available on the ships in accordance with their cultural custom of sharing possessions with other members of the community. This led to the Chamorros being banned from the Spanish ships due to their reputation as thieves and gives insight to the, at that time, rather distant and hostile interaction between the two groups.

For over a century, the Chamorro culture was not significantly influenced by the Spanish. Although officially claimed by Spain in 1565, they did not settle there until the 17th century. Occasional Spanish ships would stop over on their trans-Pacific trade route bringing Asian spices and products from the Philippines to the Americas. They would anchor off shore for a few days and trade iron for food and water.

Spanish Jesuit missionaries were the first to permanently settle on the island. Their mission was to evangelize the indigenous, whom they believed to be pagans. Churches were built and priests began to baptize the islanders, particularly the children. The first baptized Chamorro child was given the name "Mariana," after the queen of Spain, which would later become the name of the island archipelago. The mission was led by Father San Vitores, a Spanish Jesuit priest who had previously stayed in the Philippines. He studied the Chamorro customs and language carefully upon his arrival and communicated extensively with the locals. This was done initially with the help of Filipino translators who had accompanied him on his journey from the Philippines to Guam. They had mastered the Spanish language due to their colonial contact with Spain and had learned Chamorro. Later, San Vitores himself learned Chamorro and held some of his sermons entirely in the indigenous language. The mission was initially received positively by the natives. They presented themselves willingly to be baptized and some even did so repeatedly, perhaps in appreciation of the festivities and food offerings at the ceremony. The Chamorro clans of higher

social status demanded the religious conversion to be restricted only to them. One can assume that they insisted on being the only group that interacted closely with the newcomers, as this segregated contact with the colonial power is a phenomenon that is described in many colonial contact situations and is part of Schneider's commentary on the first-phase-interaction between the indigenous people and the colonial power.

Some of the Chamorros remained loyal to the Spanish and they became part of a newly emerging intermixed society, while others soon became suspicious and hostile towards the colonizers for various reasons. Because the priests were mainly baptizing dying children, as a way to "save their souls" (Rogers, 1995, p. 49), their deaths were soon associated with the religious ceremony. Additionally, a severe drought which left the islanders in desperate need of food and water, resurged ancient Chamorro traditions to ask their ancestors to make it rain. Such traditions were met with disapproval by the Spanish, which led to hostility on both sides and eventually war between the Spanish and a group of Chamorros (Dixon, 2015). A large number of indigenous people died as a result of these conflicts, as well as internal conflicts between the various Chamorro clans. The arrival of the foreigners also meant that the islanders came into contact with lethal diseases unknown to them. No conclusive number of the population decline is available, as most of the early records claim substantially different numbers. According to Thompson (1947) an estimated 50,000 Chamorros were reported living on the island during the early Spanish settlement, which was reduced to an estimate of 1,318 people towards the end of the 18th century. According to these records, only 2% of the ancient Chamorros survived, of which a large number was already intermixed with the more recently arrived settler groups. Marriages between Chamorros and the Spanish, as well as Filipinos who had accompanied the Spanish colonizers from the Philippines, had become common at this point.

With the decline of indigenous people, Western cultural and religious influence on the island increased. European customs of the colonizer were adopted to all aspects of daily life: The Chamorros started dressing in Western clothing, musical instruments and Spanish songs were played, and cockfights and card games became common local pass times. New farming methods were introduced, such as the cultivation of maize and tobacco and farm animals such as pigs, cows and chicken were brought in.

The indigenous naturally also came into close contact with other languages. Spanish was used regularly, particularly in public offices, where Chamorros of any ranks were allowed,

provided they spoke the language of the colonizer. Spanish had a noticeable impact on the Chamorro language. Many loan words were adopted as a result of the close contact and emerging family ties with the colonizer (c.f. *section 3.8.2.1 - Lexis*). Children were educated in Spanish in schools that were all initiated under the church with the aim of spreading Christianity. At the same time, Chamorro customs and the language were passed on, also in interracial marriages, as it was mostly the Chamorro women who looked after the children and spoke to them in their native language.

Among the sailors who frequently stopped over on the island was a considerable number of Filipinos, accompanying the Spanish on their voyages, some of whom remained in Guam. As early as 1787, the Filipino population is reported to have made up almost 20% of Guam's population (Crocombe, 2007). Many of them were soldiers and mission personnel. Later, convicts and political prisoners were sent to the island as conscript laborers. The Filipino population continued to grow over the next centuries and intermixing with locals was common. Filipinos remain a large and linguistically influential community on the island today.

Guam also became a frequent stopping point for whalers and ships crossing the Pacific Ocean from the Philippines to Mexico. They, too, were in close contact with the indigenous people. They sometimes offered useful trading goods, such as the work of handymen or blacksmiths, or materials that were unavailable on the island. In return, they received food and had a chance to rest before continuing their journey. The trade with incoming ships became Guam's main source of income, as an average of about 60 ships per year stopped for trades. Some whalers stayed longer, even had (several) wives, and continued to influence the indigenous population with their customs and language. Whalers and beachcombers were often English speakers who used a simplified language to communicate with the locals. Master Frances Pretty, who is reported as the first Englishman to visit Guam, provides a detailed account of the first encounter between his crew and the indigenous of Guam at the end of the 16th century:

We were met with 70 or 80 sailes of canoes full of savages, who came off to sea unto us, and brought with them in their boats plantans, cocos, potato rootes, and fresh fish, which they had caught in the sea, and held them up for to truck or exchange with us, which when we perceived, we made fast little pieces of old iron upon small cords on poles and so vered the iron into the canoas [sic], and they caught hold of them and took off iron and in exchange of it they would make fast unto the same line either a potatoe, roote or a bundle of plantans which we haled in, and thus our company

exchanged with them untill [sic] they had satisfied themselves with as much as did content them:
yet we could not be rid of them [sic]. (reported in Hornbostel, 1924, p. 3)

Toward the end of the nineteenth century, settlement patterns on the island began to change. Spain had lost all of its colonies in Latin America and neglected those in the Pacific. At this point, Guam's population had declined to around 9,000, which included the Chamorros, the Spanish, the Filipinos and few Carolinians, who had settled in Guam as a relatively isolated group (Thompson, 1947; Underwood, 1973). At the same time, the U.S. was emerging as a colonial power in the Pacific region. Americans generally reasoned for their expansion by claiming that they were "ordained by God to create a model society" (Crocombe, 1995). President James Monroe stated in a message to the U.S. Congress in 1823 that European interference with independent states in the Western hemisphere would be regarded as a threat to the U.S.' peace and safety. This statement became known as part of the Monroe Doctrine and underpinned the rationale for the U.S. to move forward in claiming Pacific nations that were under the governance of Spain, such as the Philippines and Guam (Freeman, 2010, p. 165). The Philippines and Cuba were the main focus of the initial phase of the conflict between the U.S. and Spain. In both places, internal revolts had already caused the Spanish empire to crumble. The pretext for an escalation between Spain and the U.S. was an explosion on the warship *USS Maine*, which was stationed in Havana harbor, Cuba. Spain was blamed for this attack and as a consequence, a conflict between the two nations erupted, resulting in the Spanish-American war (p. 171).

Guam, then still a Spanish colony, had not received any news of the ongoing conflict between the two nations in months and the government, who had been informed that the conflict would be settled peacefully, was entirely unprepared when four 'hostile' American vessels arrived in Guam in 1898. Due to the lack of preparation, they quickly had to surrender to the U.S. This marked the end of the Spanish era and the beginning of American rule in Guam.

3.2 *The First American Period*

An agreement between Spain and America was signed at a peace conference held in Paris, as an attempt to end the conflict between the two nations. By terms of what is referred to as the Treaty of Paris, Guam was ceded by Spain to the U.S., along with Cuba, Puerto Rico and the Philippines. This made the U.S. a colonial nation and a considerable political power in the northern Pacific

region, alongside Germany, which colonized the remaining Mariana Islands, as well as other territories in Micronesia. Guam became U.S. territory and now had a U.S. naval administration and its first American governor.

Though the change in government from Spanish to American had been conducted peacefully on the island, the newcomers were met by the islanders with initial skepticism, and vice versa, which was described by Carano and Sanchez (1964, p. 187) as follows:

Since the Americans knew almost nothing about the island, many of them expected to find it inhabited by savage 'South Sea Islanders.' They soon learned, however, that the Guamanians were civilized people who possessed a long established Spanish-Catholic tradition and that a number of them could even speak English. The Guamanians, on the other hand, were just as surprised at the Americans, who they had been led to believe were barbarians and heretics. They found that, in general, the newcomers sought only to befriend and help them. On both sides, however, a certain amount of suspicion and distrust remained.

The Americans were viewed as "less sophisticated than the Spaniards," according to Rogers (1995, p. 119), and it was initially again mostly the elite that built a relationship of trust with the leaders of the newcomers. Occasional fights erupted between locals and the American marines, but also within the local ethnic groups, particularly between the Chamorros and Filipinos, of whom many were ex-convicts. A lot of this unsettlement was blamed on the consumption of alcohol, such as the locally made *Tuba*, a drink made of coconut sap, originally introduced to the islanders by the Filipinos. In an attempt to promote peace, the new government prohibited people without a pass to be on the streets between 9pm and 5am, along with the prohibition of alcohol for anyone that had not been on the island before 1899 (Rogers, 1995, pp. 182-190). The Chamorros eventually asked the new government to deport the Filipino ex-convicts from Guam, which was soon granted and realized.

More changes were introduced by the new government, such as the U.S. dollar as the new currency of Guam, replacing the Mexican dollar and the Philippine silver dollar. The church-run school system that had been set up by the Spanish was replaced by a public system under naval control. The level of education had until then been rather low, with much of the population being

illiterate (Sanchez, 1987, p. 89)¹⁸. This became evident when the navy administration required Guamanians to register their land with the government, but found that many of the inhabitants were unable to sign their own name on the designated forms (Carano and Sanchez, 1964, p. 193). The military started to take over land from the Chamorros, offering them a rather unfair trade: land was leased by the military for short periods at a time and the local land owners vacated their homes, expecting to be compensated for their possessions. Many of the payments, however, were never made; an injustice still brought up frequently by the Chamorros (“Governor of Guam, Annual Report”, 1922, p. 51, reported in Carano and Sanchez, 1964, p. 231).

Further changes were conducted by the new administration: an effort was made to separate church and the government. Crucifixes and saints were to be removed from the schools that had recently been made public, Spanish priests were eventually deported to Saipan and the Philippines, divorce was made possible and marriages were ordered to be consummated according to the law, rather than exclusively under the church. The Catholic religion was only to be practiced in the home and not in public places (Carano & Sanchez, 1964). Public health was a main concern on the island, as Americans highly criticized sanitation standards. The Chamorros were described as “very dirty in their habits” (“Governor of Guam, Annual Report”, 1904, p.2 reported in Carano and Sanchez, 1964) and the sewage systems did not conform to American standards at the time. This was likely the reason for the main causes of death being dysentery, tuberculosis and unclean methods during child birth. As a counteraction, the naval government offered free medical care to improve the situation. This measure, along with better sanitation, drastically improved the islanders’ health and marked the beginning of a steady increase in population and life expectancy. By 1908, the population in Guam was as follows:

¹⁸ Other accounts report moderate literacy levels with 50% of the population being literate in Spanish and 75% being literate in Chamorro (Carano and Sanchez, 1964)

Population of Guam in 1908

Guamanians	11,159
Naval Station Personnel	
Officers and families	23
Naval employees and families	26
Navy enlisted men	33
Marines	90
Other off-islanders	
Americans	14
Chinese	6
Englishmen	14
Germans	11
Greeks	1
Hawaiians	1
Hollanders	1
Irishmen	1
Japanese	101
Puerto Ricans	1
Spaniards	8
TOTAL	11,490

(Carano & Sanchez, 1964)

According to the above listed census, only a small percentage of off-islanders, i.e. Americans, Chinese, Englishmen, Germans, Greeks, Hawai'ians, Hollanders, Irishmen, Japanese, Puerto Ricans and Spaniards according to the above provided list, resided in Guam in the early nineteen hundreds (331 out of the 11490 residents). The highest representation of off-islanders was the American naval personnel (172 people). They interacted with the locals (i.e. the often intermixed Chamorros, Spanish and Filipinos) daily, as many of the navy personnel were busy with tasks such as the improvement of sanitation, informing the public of the available free health care and registering land ownership. Another well-represented group were the Japanese (101 people). They were in control of international trade, as there were no freight-carrying vessels between Guam, the Philippines and the American mainland in the early phases of the American rule. This also caused the prices of many retail goods to be very high (Carano and Sanchez, 1964). The locals of Guam did not participate in the larger international market.

The occupation of the locals consisted of farming, which was only significant enough for self-sustainment. Many of them lived in towns and villages, but had ranches in rural areas, which they commuted to daily, often travelling great distances to get there (pp. 201-206). The most common crops were rice and copra to extract coconut oil. Some also worked as trained carpenters, masons, mechanics, plumbers, printers and clerks for the naval station (p. 202). Even though surplus crops could be sold at local markets and to some extent internationally along with crafted

goods such as weavings and products made out of shell, Guam did not participate significantly in world trade. More and more locals started seeking work opportunities in government.

Already during the early stages of American colonialism, the language use of the locals started to show changes, mostly due to policies from the new government. Initially, most of the natives were still speaking Chamorro and a few spoke Spanish. While during the Spanish colonization period, the Chamorros were described as portraying a “remarkable resilience of [their] identity beneath the seemingly heavy veneer of foreign acculturation” (Rogers, 1995, p. 106), the Anglophone colonization period was much more influential on their identity. The Chamorros were described by the new government as being “easily controlled and readily influenced by example, good or bad.” (“Governor of Guam, Annual Report”, 1904, p. 2 reported in Carano and Sanchez, 1964). This characteristic was expected to be beneficial to the efforts to eradicate the Chamorro language by implementing policies, such as the General Order No. 12, that made the use of English mandatory in schools and forbade the use of Chamorro in schools (Palomo, 1987; Kuper, 2014) (c.f. *section 3.8.1 - Language Shift*).

The geographic location of Guam was of strategic interest to many nations and as WWI was erupting in Europe, Guam was under threat of an attack by Germany or Japan. Japan had declared war on Germany in 1914 and seized a number of Micronesian Islands which had been under German control. Amongst them were also the Northern Mariana Islands, which brought the conflict in close proximity to Guam, which had, up to that point, proclaimed neutrality in the ongoing war. The U.S. soon declared war on Germany. It is reported that the first shot of the U.S. military in WWI was fired in Guam, but this incident remained the only significant hostile encounter between the U.S. and Germany in the Pacific (Rogers, 1995): The German crew of the SMS Cormoran II that had been stationed at Guam’s Apra Harbor for several years prior to the declaration of war refused to surrender their ship after the request of the naval military. Though the U.S. had fired an initial shot at the vessel, it was the Germans who eventually sunk their own ship, refusing to surrender it. Its wreck is to this date a historic site visited by many divers. Between 1914 and 1918, Germany lost all its colonies in the Pacific. German Samoa was taken over by New Zealand forces, Nauru and German New Guinea by Australian forces, and Japan seized the German Mariana, Caroline and Marshall Islands. With that, Japan moved into the neighboring area of

Guam, which would soon become a major threat to the only island in the area that was still under American rule.

In the years between the two world wars, the potential threat of Japan on the U.S. became more and more prominent. A number of anti-Japanese books were published, some of which even predicted a potential attack on Guam. The Americans vehemently objected in front of the United Nations to treaties formed between Japan and Britain, France, and Russia regarding mutual support for the retention of their respective colonies. During the same time period, the depression left its marks on Guam. The already limited export of copra, a dried coconut product, was reduced further, and there were not enough funds to improve the school systems, for which only a limited number of teachers and classrooms were available to tend to the growing number of students. In the late 1930s, civil aviation was first introduced to Guam, and the airline Pan America started offering flights between California and Asia (for example between San Francisco and Manila) that stopped on the island for a layover, allowing for more mobility of the Chamorros, as well as more frequent visits from outsiders. This increased mobility, however, was short-lived, as the flight route was shut down again soon after, as WWII was erupting in the region.

3.3 Japanese Period

In 1941, amid WWII, it became evident that Japan was planning an attack on Guam. Japan had shown interest in the Micronesian region for several decades prior to WWI, and by 1914, it had controlled every populated island apart from Guam, Nauru and the Gilbert Islands. Japan's rise as a colonial power was promoted as a fulfillment of the country's destiny. The historian and advocate of Japan's expansion in the Pacific, Takekoshi Yosaburō, argued that "it is our great task as a people to turn the Pacific into a Japanese lake" and that "our future lies not in the north, but in the south, not on the continent, but on the ocean" (reported in Myers and Peattie, 1984, p. 179). Micronesia was located along the trade route from the Americas to Asia, and at the same time, the Pacific islands provided a defensive buffer between the two regions, an ideal location for military bases as well as further settlement, providing tropical produce that could be marketed on the Japanese mainland.

On December 8th, only hours after the attack on Pearl Harbor, which marked the entry of the U.S. into WWII, Japan started bombing Guam, targeting military structures and parts of the

town Hagåtña, today's capitol. Guam was captured within hours. The island was soon renamed Omiya Jima, and stayed under Japanese occupation for 31 months. Although the attack was foreseen by the Americans, the troops are reported to have seemed relatively unprepared and did not provide the resistance that the Japanese were expecting (Rogers, 1995, p. 168).

The style of Japanese occupation varied greatly across Micronesia. While the Japanese presence in, for example, Saipan and Palau included close interaction between the locals and the newcomers and an increase and improvement of infrastructure, such as schools, it was marked by the brutality of WWII on other islands, such as Kiribati, Nauru, and eventually Guam. This discrepancy is perhaps best illustrated in the different experiences of Japanese occupation between the islands of Saipan and Guam, which are located less than 250 kilometers away from each other: The Japanese settled in Saipan already in 1914 after they had invaded the German-occupied island during WWI. As a result of colonial expansion, many Japanese civilians relocated to Saipan and soon outnumbered the local islanders. Many were of a similar economic position as the locals and got along well with them. Japanese-Chamorro intermarriages were not uncommon (Spoehr, 1954). Soon, many Saipanese Chamorros were able to speak Japanese. In fact, some would later be employed as Chamorro-Japanese translators for the Japanese in Guam during WWII. This was cause for many years of resentment between the Chamorros from Guam and those of Saipan, as the Saipanese Chamorros were considered allies of the enemy (Taitano G., 2018).

The Japanese occupation in Guam, compared to other Micronesian islands, was much shorter, and the interaction with (few) Japanese settlers was minimal and marked by the brutality of WWII. Chamorros were expected to bow to every Japanese person they encountered. Offences were often punished with beating, and in severe cases with people having to dig their own graves (Rogers, 1995). Food rationing was imposed on the inhabitants, as the finest food was to be sold to the Japanese first before anybody else was allowed access to it. Local children were only minimally educated, attending school only a few hours a week, as they were expected to help build new Japanese military structures (c.f. *section 3.5.3 - Education During the Japanese Period*). A Chamorro war survivor interviewed for the present study remembers her experience as an 8-year-old girl under the Japanese occupation:

after they killed [name] then they're going to kill us. They tell us to dig a hole.

We stayed there in my auntie's house, and we knew the Japanese coming and my mom said [...] they're going to come and kill us all 'cause you know from where the old town house is all the way is Hagåtña all dead people all [...] a lot of dead people, the Japanese kill anybody (Female Chamorro war survivor, age 84).

Because of hardships imposed on the islanders by the Japanese, a general longing for the U.S. to return is reported (Kuper, 2014; Sanchez, 1987). This was, for instance, expressed in a song, wishing for “Uncle Sam”, the personification of the U.S. government, to return. This longing for the U.S. to return will be addressed again at several points throughout this work as it was an essential factor in changing the local’s attitudes towards the U.S. and eventually played a significant role in cultural and linguistic change.

Uncle Sam, I'm sad and lonely
Uncle Sam, come back to me.
Uncle Sam I love you only
Oh, please come back and set me free.
Oh, Mr. Sam, Sam, my dear Uncle Sam
The action came to Guam,
Eighth of December,
Nineteen forty-one.
Oh, Mr. Sam, Sam my dear Uncle Sam
Won't you please come back to Guam?
Our lives are in danger
You better come
And kill all the Japanese
Right here on Guam
Oh, Mr. Sam, Sam, my dear Uncle Sam
Won't you please come back to Guam
(Sanchez, 1979, p. 226)

The Japanese occupation continued until July 1944. Towards the end of the occupation, masses of Chamorros were marched to designated areas on the island. Older informants for the present study remember the journey by foot from all corners of the island, which was strenuous and caused many

deaths. The largest group of locals was marched to Manenggon, a Southern valley of Guam, where a camp, in historic accounts referred to as *concentration camp*¹⁹ (Babauta, 2018; Rogers, 1995), was built to shelter the Chamorros. Some accounts say that the concentration camps were established because a mass-massacre was planned by the Japanese, but prevented just in time by the ending of the war. Others claim that the civilians were marched there for security reasons, to keep them from interfering with the planned defense of the island upon the return of the U.S. (Babauta, 2018; Rogers, 1995, p. 179). In fact, the camps kept many Chamorros safe from getting caught in deadly crossfires between Americans and the Japanese during pre-invasion bombardment (Murphy, 2019). An attack by the Americans was expected, as near-by Saipan had been reclaimed by the Americans a month prior. On July 21, 1944, the U.S. launched its attacks on Guam, which lasted until August of the same year, taking over 18'000 Japanese lives (Rogers, 1995, p. 194). One of a few Japanese survivors that remained on the island was Shoichi Yokoi, a sergeant who fled into the jungle instead of choosing suicide, which was culturally expected of the survivors of the Japanese military. He survived in the jungle by living off the land until 1972, when he was discovered by hunters. A rebuilt version of his cave near Guam's Talofofo River is often visited by tourists.

Although “liberation” from the Japanese occupation had been publicly presented as one of the main reasons for the Americans’ takeover of the island, it was evident that Guam’s geographic location in the Pacific was of significant interest to the U.S. military. Guam is the only island located in an ideal position between Hawai’i and Asia that has a protected harbor and enough land for large military bases, including an airport. These reasons, among others, were certainly an essential driving force for the U.S.’s return to the Pacific region. The great relief of American troops “saving” the Chamorros just in time is a story that was reported to me repeatedly during fieldwork. It is this early period of the American return that scholars mark as the time when a shift in the locals’ attitudes towards the Americans occurred, and it is likely that this caused them to be

¹⁹ Forms of concentration camps have been put in place since the 1800s in all parts of the world, which included, for example, the detention of Cubans by the Spanish, the detention of Filipinos by Americans, and many more. Since WWII, the term is mostly associated with the horrors of concentration camps that were put in place by Nazi Germany (Pitzer, 2017). It is still, however, a term used globally to refer to the detention of innocent civilians and includes the context of WWII in Guam. C.f. Florido and Meraji (2019) for an in-depth discussion the definition of the term and its meaning before and after WWII.

more receptive to the American way of life, including cultural and linguistic adaptations (Kuper, 2014) (c.f. section 3.8.1 - Language Shift).

3.4 *Second American Period*

Back under American ruling, certain aspects of life in Guam went back to the way they were prior to the Japanese occupation, and many were improved. A movie theater was reopened, the Bank of Guam resumed business, and better infrastructure, including safer roads and more sustainable, typhoon-safe concrete houses were built. Access to foreign goods regularly arriving by ship or airplane was ensured. The military infrastructure was also increased, for which a great portion of Chamorro land was used, which had been taken away from the locals.

The buildup of American military and the necessary rebuilding of infrastructure after the war created new work opportunities for the natives, who moved from farming professions into paid labor for military and civilian contractors. This included women, who started working in offices, mainly as secretary clerks and telephone operators, with an average working week of 40 hours (Rogers, 1995). The military was an attractive employer with comparably high salaries, as there were otherwise not many opportunities to work on the island. Many Chamorro men joined the U.S. military and played an essential role in the first combat units deployed to Vietnam in the 1960s. In fact, so many young men joined the military during this time that I was told I would have a hard time finding older Chamorro male study participants that *had not* been highly mobile at a young age. A great majority of them travelled abroad with the military. Guam, along with other Pacific island nations affiliated with the U.S., continues to have one of the highest per capita military enlistments of the U.S. (National Priorities Project Database, 2004). The entry of women into the workforce and the high mobility of the men due to military service are aspects that may have significantly affected the language situation in Guam and will be discussed further at a later stage (c.f. *Discussion and Conclusion*).

It was possibly this growing political involvement with the U.S. government that prompted the locals to vigorously criticize their status as an American colony and they demanded rights to American citizenship to increase their involvement in political decision making. In 1950, U.S. President Truman signed Guam's Organic Act, which made Guam an unincorporated territory of the U.S. with limited self-governance. This gave the inhabitants American citizenship and a local

governor, who was, in the initial phase, appointed by the U.S. President. Only in 1968 did Guam residents gain rights to vote for local government. The U.S. presence on the island and the islanders' political status are still subject to dispute. Several options for a change in political status are discussed today. Some voices suggest Guam's independence, others advocate to stay in status quo as an American territory or a move towards statehood (Underwood, 2014).

The increased political and cultural involvement with the U.S. led to Americanization and a steady disappearance of the indigenous culture of the islanders, including the Chamorro language (c.f. *section 3.8.1 - Language Shift*). As Rogers (p. 245) puts it: "The American presence permeated every nook and cranny on the island with music, words, and images". Once military security measures were lifted, Guam was more freely accessible to outsiders, which encouraged a range of nations to visit or even settle on the island and increased cultural diversification further. Among the most well-represented ethnic groups were the Filipinos. They mainly came to Guam as a legalized work force under American visa agreements. The Filipinos are still the most well-represented ethnic groups on the island. Their cultural assimilation and interaction with the Chamorros, as well as their linguistic development will be discussed further throughout this dissertation. Further cultural diversification came from the many tourists that started coming to the island in the 1970s. Initially, it was mostly Japanese vacationers and honeymooners who contributed to the continuous growth of the tourist sector. Guam's tourism continues to thrive today with a majority of the tourists being Japanese and Korean. Around a third of Guam's total employment is sustained by visitor spending which may be part of the reason why many Guam residents attach great importance to having tourism on the island (Tourism Satellite Account, 2016).

Guam's melting-pot society now includes a population of 167,358 inhabitants (July 2017 est.) with the indigenous ethnic group, the Chamorros, forming a plurality, but not a majority (37.3%). Filipinos now represent 26.3% of Guam's society, but many more ethnic groups have settled on the island, including, among others, Caucasians (7.1%), Chuukese (7%), Koreans (2.2%), and other Pacific islanders (2%) (CIA, n.d.). Many identify as being of mixed race, which is justified, considering the long standing contact between some of those nations, particularly between Chamorros and Filipinos, who each are likely to have Spanish ancestors. The diversity in Guam's population and the close interaction between the various ethnic groups will be addressed again in

the discussion of the emergence and development of the nativized variety of Guam English at several points throughout the thesis.

3.5 Education and Language Policies

3.5.1 Education System Prior to the American Colonial Periods

The development of the education system in Guam likely influenced the cultural and linguistic development of the islanders, and particularly shows the great influence of both Spanish and American colonial power on the locals. Prior to their contact with the Western world, Chamorros did not have formal education. They were taught through apprenticeship and observing elders. Some important skills to learn for a selected few were herbal medicine, canoe or house building, navigation, weaving, pottery making and fishing (“Historian Taotao Tano’: History of the Chamorro people”, 1994 reported in Indalecio, 1999).

It was only with the first contact with the Western world that the concept of a formal education system began to spread. During the Spanish colonial period, though, education was mainly focused around religious education. School was taught by Spanish priests and religion was the central topic. Many other skills were not regarded as necessary, as Guam at that time was not participating in the world economy at large. The main subjects that were taught included music, primary letters and instructions to become assistants to priests. The Spanish especially did not place high value on educating the natives, leaving 90% of the Chamorro population illiterate (Carter, Wuerch and Roberto Carter, 1997, p. 182).

3.5.2 Education During the First American Period

With the Americans arriving in 1898, education became more of a priority on the island. It was mandatory for children between the ages of 8 to 14 to be signed up for school. Any parents that did not do so, were punished with large fines. As a result, school attendance rose continuously. Students were taught practical skills in agriculture and gardening. Girls were taught dressmaking, sewing, and embroidery (Carter, Wuerch and Roberto Carter, 1997). A series of executive orders were issued regarding language use (U.S. Navy Department, 1905, pp. 15-16, cited by Palomo 1987, p. 21): English was to be the language of instruction and the Chamorros were urged to start learning the language of their new colonizer:

Instruction in the English language will be introduced in the public schools as soon as suitable teachers can be provided, and it is expected that the present force of native teachers will cheerfully and harmoniously cooperate with the teachers of English in order that the greatest benefit may be derived by both scholars and preceptors (p. 16).

The main teaching objective was for students to reach “a practical-level reading, speaking and writing knowledge of the English language” (Carter, Wuerch and Roberto Carter, 1997, p. 189). This was achieved by rigorous enforcement of English being the only language spoken in the classroom. Exercises mainly focused on oral repetition and less grammatical rule learning. The Guam Department of Education published their teaching aims and methods in the local newspaper:

It is only through practice that fluency in a new language is attained. The mere learning of rules of grammar is not sufficient. Vocabulary pronunciation and inflection come largely through imitation repeated until fixed habits with reference to them have been formed. [...] Three-fourths of all English work in our schools is oral and not a word other than English is used in the schools. This is known as the direct method of teaching English. It has been employed in Guam during the last year and found satisfactory. [...] Hundreds of thousands of children under the Stars and Stripes are taught the English language so effectively that they successfully carry on their entire school work in it after a remarkably short period of special teaching. (n.a., 1925, p. 8)

During the early stages of American rule, three U.S. mainlanders were employed as teachers, along with some military personnel that were diverted from their regular duties to teach in schools (Rogers, 1995, p. 188). General criteria for instructors were that “one had to have a clear voice, distinct enunciation, patience, clear handwriting, an ability to teach English, a good character, and good health.” Gradually, Chamorros were educated to become teachers. In 1912, the first group of Chamorros went off-island to receive teacher training in the Philippines. In the coming years, schools hired Chamorro teachers, alongside Filipinos and mainland Americans.

The ethnic backgrounds of the teachers to this day is highly variable, depending on the type and location of the school, as well as the availability of personnel. In the 1930s, for instance, the school system suffered from a financial crisis in connection with the Great Depression, which resulted in minimal funds for teaching staff from overseas. During this time, mainly Chamorros

were teaching in schools. Reportedly, locals did not have good command of the English language, even though the education plan prescribed a monolingual English education (Rogers, 1995).

After 1930, local schools were separated from elite schools that were educating mainly children of military personnel, charging high tuition fees (Carter, Wuerch and Roberto Carter, 1997; Rogers, 1995). This change was established arguing that military dependents would eventually return to the U.S. mainland. The Department of Education reasoned at the time that

It is due to the different conditions under which the children will be called upon to maintain existence. In all reality, Chamorro children will remain in Guam where higher education is inordinarily [sic] unnecessary. (Reported in Carter, Wuerch and Roberto Carter, 1997, p. 194)

This meant that local schools only taught up to sixth grade and offered additional schooling for practical trades, in contrast to the children of military personnel, who were offered a much higher standard, comparable to U.S. mainland conditions. The option to send military dependents to separate schools (Department of Defense Dependents Schools) remains until today.

3.5.3 Education During the Japanese Period

Schooling was held at a very different standard during the Japanese period. It was war time and many children were not able to attend school. They stayed with their parents to help them raise crops (Indalecio, 1999), or they worked as labor force for the Japanese. A participant in my study reported that many children in her neighborhood were enrolled in building landing strips for a new airport. She was only allowed to visit school on Fridays. After the war, she therefore had to return to second grade at the age of eleven to resume her studies.

A curriculum included around 10 hours of Japanese language class per week. During this period of time, English was not allowed to be spoken. As one of my study participants reports, the enforcement of this rule was strict:

You cannot speak English 'cause the Japanese won't let you speak English. They'll kill you even to sing a song- in Japanese- they don't let you speak English. They cannot speak English t- So when the American came [...] that's when we started again speaking English. (Female Chamorro war survivor, age 84)

During Japanese occupation, “the mastery of the Japanese language was considered to be fundamentally important as the first step in Japanisation during the occupation period,” as Higuchi (2001, p. 24) notes. Lessons were mainly taught by Japanese sailors, relocating from the neighboring islands of Saipan, Tinian and Palau to teach their native language. As part of a regular school day, the students pledged: "I am Japanese. I am loyal to the Emperor of Japan" (Sanchez, 1979, reported in Indalecio, 1999, p. 88). They learned reading and writing Katakana, one of the Japanese alphabets, arithmetic, and Japanese games and songs (Sanchez P. , 1987).

Because school attendance was minimal and Japanese occupation only lasted for a few years, the language and education policies imposed upon the natives during that time did not result in a generation of Chamorro Japanese speakers. Some speakers remembering war time report that they did not enjoy speaking Japanese and have forgotten most of what they had learned of the language (Kuper, 2014). The limited education in Guam during Japanese occupation is likely due to an obviously unfavorable environment during WWII times. On other Micronesian islands, where the Japanese presence was longer, settlement more significant in numbers and more interconnected with the locals, a school system was developed and the islanders became fluent in the language (e.g. Palau, c.f. Britain and Matsumoto, 2015) and Saipan, c.f. Joseph and Murray, 1951).

3.5.4 Education During the Second American Period

Shortly after the return of U.S. forces to Guam, mandatory education was resumed. It was based on the American education system, directed by a navy officer, with local teachers using Standard American textbooks in the classroom. Lewis (1946) documents the state of the school system shortly after the war. He describes the ethnicity of the teaching staff as “Guamanian,” a term that was mainly used during the beginning of the second American period and included Chamorros as well as Filipinos local to Guam.

Schools were reestablished in October 1944, less than three months after the landing of United States forces. Currently there are 21 schools, 173 teachers, and 7,600 students; all of the instructors are Guamanians. The system, directed by a Navy officer, is organized under a Guamanian Superintendent of Schools. Regulations require the teaching of English as the language of instruction, and the establishment of compulsory education as soon as practicable from the ages of seven to sixteen. (p. 98)

Because of limited access to education during the Japanese period, school was especially important for the introduction of the English language, as many children still grew up in Chamorro-speaking households and were not in contact with the English language until they entered the school system. In pre-school, the main objective was “to give the pupils a simple vocabulary so that they can express themselves to some extent in English” (p. 98). This included teaching the Chamorro children simple greetings, names of objects, body parts and animals. The children were expected to learn through observation and repetition. The strict implementation of English remained a strategy of the U.S. Naval Administration until the 1970s. School children were frequently punished or fined for speaking the indigenous language. Some of my informants remember their school punishments for speaking Chamorro:

Every time they caught me speaking Chamorro, they gave me a dumb hat. Walked out to the principle office, because we cannot speak Chamorro at that time. (female Chamorro, born around 1943)

Gu55f83: You pay, I think, maybe five cents if you speak English- I mean Chamorro.

Eva: Five cents

Gu55f83: That's why-

Eva: Did you get- get- did they catch you speaking Chamorro?

Gu55f83: [M-m don't know] [with err] you know we didn't let them hear us, yeah.

Eva: Yeah [laughs] [good]

Gu55f83: But when we go back home, we speak Chamorro.

Eva: Yes

Gu55f83: Only when we're at school that we cannot.

(female Chamorro, Gu55f83, born around 1933)

In the initial years after the return of the U.S. administration, families continued to speak Chamorro at home. However, government policies to enhance the use of the English language contributed to the decline of indigenous language use. The language shift from Chamorro to English will be discussed further in section 3.8.1 - *Language Shift*.

In recent years, the school system in Guam has continued to follow the system of the U.S., accredited by the Western Association of Schools and Colleges (Indalecio, 1999), which includes

the U.S. Pledge of Allegiance, which has to be recited by the students every morning. A kindergarten through 12th grade system is applied and supplies, such as instruction materials, are reported to be sufficient. Most of the teachers have college degrees; many of them were attained from the University of Guam (Indalecio, 1999, p. 91). A majority of the teachers identify as Chamorro (66%), but other ethnic groups are also represented, e.g. Filipinos (22.7%) Caucasians (5.1%) and others (1.2%) (Guam Bureau of Statistics and Plans, 2013). There are currently 26 elementary schools, eight middle schools and six high schools in Guam (Guam Department of Education, 2017). Additionally, tertiary education is available at the Guam Community College and the University of Guam.

Apart from the already established U.S. kindergarten through 12th grade system, public schools are now required to offer programs to promote the Chamorro language and culture. This is meant to counteract the decline of Chamorro speakers, as well as to help those that were raised speaking Chamorro and having limited command of English. A Chamorro-English bilingual-bicultural program was already put in place in 1971 (Indalecio, 1999, p. 98), which later evolved into the Chamorro language program that organizes the teaching of Chamorro language and culture in public schools and is responsible for providing appropriate teaching material. This gives teachers the option to use the Chamorro language during class. The program is mandatory in public school from kindergarten to grade five, as well as one year in middle school and one year in high school (Indalecio, 1999, p. 100). It is designed to teach students Chamorro history, cultural narratives and the indigenous language, for which they learn the basics, such as memorizing colors, days of the week and simple phrases. The classes, however, appear to be tokenistic rather than practical and have been rather ineffective in getting the younger generations to learn the language. Those that are fluent in Chamorro have become so due to close interaction with their Chamorro-speaking grandparents (Santos-Bamba, 2013).

Private schools are not required to offer Chamorro classes, but there are a number of them that do implement the Chamorro culture into their curriculum on a voluntary basis. There are also private immersion schools, mostly geared toward preschoolers, that teach school subjects almost exclusively in Chamorro.

Apart from the public school sector, there are also a number of private schools present on the island, many of which are Catholic schools. Private educational institutions enjoy a good reputation on the island, particularly the ones that offer smaller class sizes and International

Baccalaureate (IB) classes. Tuition fees are generally very high, and as a result, the most expensive private schools on island are visited by students of higher socio-economic status, often also by off-island residents such as Koreans and Japanese that prioritize an American-based school system and benefit from the geographic proximity of Guam to Asia. Military dependents continue to have the option to attend the Department of Defense Education Activity (DoDEA) schools, which are located on the military base. DoDEA school teachers' children are also given access to these schools, which results in local children being well-represented in the classroom.

3.6 Media

The media holds tremendous power for linguistic influence and plays a significant role in the spread of the English language. In fact, Topping (2003, p. 523), considers the media to be “the most powerful force behind the dominance of English.” In the case of Guam, a great majority of the most widely accessible media, whether it is printed, television or online media, is available exclusively in English, and a majority of the media content comes from the U.S.

Many newspapers in Guam have been run since before WWII times. The first newspapers, as well as the ones resurfacing after the Japanese occupation, were originally published by the Naval Government. One of the first newspapers on the island was *The Guam News Letter*, which initially focused on reports concerning the naval government and the military community, but also reported on local events and some international news. The same newspaper later became the *Guam Recorder*, and, among other content, it encouraged the use of the English language by the locals. It was ceased at the beginning of WWII. Today, the military continues to publish news in *Joint Region Edge*, which is mainly addressed to military personnel overseas (Brooks, 2014). *The Pacific Daily News* (originally named *Navy News* and later *Guam Daily News*) was founded in Guam and is now owned by a mainland American media holding company. Along with the *Guam Daily Post*, it is one of the most widely read newspapers on the island. Most newspapers are printed in English, but few are also available in other languages: *Umatuna si Yu'us*, a newspaper published under the Catholic church of Guam, was originally intended as a bi-lingual English/Chamorro newspaper, though its content is now mainly written in English. Newspapers in other languages are mainly in Japanese, Chinese and Korean to serve the expat communities and tourists. The content of the largest newspapers on island is international to some extent, regularly covering

major news coming from the U.S. It also includes a large share of local news, such as information about upcoming local events, the weather and political debates.

A large variety of TV channels are available in Guam, most of which are channels regularly available in the continental U.S. The locally based company *Docomo Pacific* is the main provider for telecommunications and entertainment. There are five local stations: KUAM, PBS Guam, Abc7, Fox 6 and CW4 Guam (Station Index, 2017). They offer local content (occasionally including content in Chamorro), news and advertisements, but are also each affiliated with a major network from the U.S. that provides popular TV shows (NBC, PBS, abc). Apart from cable TV, Netflix is also popular on the island. Locals watch and passionately discuss series that are popular in the U.S. and around the world (e.g. *Game of Thrones*, *the Office*). A Chamorro-speaking channel, *Estacion Minagof* by KUAM, existed for a short period of time during the 1990s, but has since been discontinued (KUAM News, n.d.).

Radio Stations in Guam are often connected with the above mentioned local TV stations and newspapers. A particularly popular radio station is KUAM's i-94. Mainly U.S. American and international hit songs are played, but also local music is aired regularly, also during time slots that are exclusively designated to playing local music, where musicians are invited to the studio to play live (*Live Local Fridays*). A Chamorro media personality and comedian, Chris "Malafunkshun" Barnett, regularly hosts radio shows where he addresses local issues and humorously displays Chamorro peculiarities, including mimicry of the Guam English vernacular dialect. His nickname, "Malafunkshun," is an exaggerated depiction of the vernacular Guam English pronunciation of the word "malfunction". The radio station *Isla 63 - Island Pride* is one of the few media outlets where Chamorro is regularly spoken and where content is almost exclusively dedicated to subjects relevant to the Marianas and parts of Micronesia.

Online media has gained momentum in recent years, as internet access has spread rapidly on the island. As early as 2010, only around 6.7% of household units did not have internet service at home (U.S. Census Bureau, 2012). Social media is used by a majority of people in Guam: Facebook is reported to be used by an estimated 100'000 inhabitants (Internet World Stats, 2017), i.e. by around 60% of the total population. Many of the most popular Facebook pages on the island are international fast food chains that originated in the U.S., as for example KFC Guam (with approx. 101'945 fans) and Sbarro (with approx. 78 601 fans) (Socialbakers, 2019). Other popular Facebook sites are the two largest local News Stations *Kuam News* and *Pacific News Center*. Other

social media platforms, such as Twitter, Instagram, and Snapchat are also popular and frequently used. The most popular social media platforms are run by American-based companies and, based on my impressions during fieldwork, English is the most frequently used language in comments and conversations.

3.7 *Diaspora*

Guam's indigenous population frequently forms larger diaspora communities; mainly on the U.S. mainland and Hawai'i. According to the 2010 U.S. Census, there are 147,798 Chamorros (some of which are mixed race) reported living in the U.S. A majority settles in California (30.1%), followed by Washington (10%) and Texas (6.9%) (U.S. Census Bureau, 2012). The Chamorros are also described as a highly mobile ethnic group in the U.S., suggesting that frequent returns to Guam are common (Untalan, 2019).

Migration to the U.S. began as early as the 1900s, when Chamorros joined whalers who frequently stopped at the island. In some cases, the Chamorros permanently relocated and remained in the U.S. In more recent times, several factors are influential for the continuing growth of diaspora communities on the U.S. mainland: Many locals join the military service and settle close to military bases, often in California, Washington and Texas. Healthcare is another reason why many residents who continuously require advanced medical care decide to move to Hawai'i or the mainland for better care opportunities. In many cases, the family and extended relatives will follow in the years to come, forming larger Chamorro communities off-island. Finally, the pursuit of higher education motivates a lot of young people to attend college on the mainland or in Hawai'i. They often remain there for better professional and economic opportunities (Untalan, 2019). This is also referred to as the *brain drain*, causing Guam to lose many of its highest achieving academics (Untalan, 2019). Chamorros occasionally form official diaspora communities where they continue to embrace the island's cultural customs away from Guam. The Sons and Daughters of Guam Club, for example, is a corporation formed in San Diego, California, that was established to provide a "home away from home" for Chamorros living in the U.S. It was initially set up by Chamorros to improve their community members' assimilation in the U.S., for example by providing English lessons, but also to preserve the island culture. Through the organization of cultural, social and

religious gatherings, dances and dinners, the diaspora communities put an effort into the preservation of their heritage (Sons and Daughters of Guam, 2019).

3.8 *Sociolinguistic Profile*

The following section provides an overview of Guam's language profile. First, I explain the language shift in the island community from speaking Chamorro to speaking English as a first language, most likely due to American colonial influence. This includes a discussion of past and current language policies that have influenced this shift, but also a short mention of the language attitudes that changed noticeably and therefore provided a large motivation for the shift. I will then proceed by describing the most well-represented languages spoken in Guam. The most important one in terms of linguistic influence on the local English dialect is likely Chamorro, as a plurality of the population comes from a Chamorro background and has been in contact with the language in school, but also often at home and when being around elders. I will give an overview description of the language, mainly based on the accounts of Topping (1973) and Stolz (2010), but also based on my own impressions during fieldwork, when I audited a bi-weekly Chamorro language class at the University of Guam. I will give an overview of the Chamorro lexis, morpho-syntax, phonology and prosody. I will further discuss the current status of Chamorro as a moderately endangered language and efforts to revitalize it. This goes hand-in-hand with current language attitudes toward the indigenous language. Finally, I will discuss further languages and dialects that may have an influence on the local variety of English. This includes Philippine English as it is spoken in the Philippines, which is not necessarily the same dialect as the one spoken by Guamanian Filipinos (c.f. *chapter 4 - part 1* and *chapter 4 - part 2*). It also includes a brief overview of the languages spoken by minorities on the island, such as Chuukese, Japanese and Korean. This section is meant to provide the necessary background information for the subsequent overview description and discussion of Guam English and its variation.

3.8.1 *Language Shift*

The Chamorros are no strangers to colonizers' restrictions on the indigenous language, and yet it was only in the post WWII times that the native language started to show a most drastic decline and a shift towards the frequent use of the English language occurred. As described in the socio-

history of Guam, the Spanish influenced the natives in several ways during the first colonial period, but reports stress that language enforcement was kept rather lax in Guam and that the Spanish, to an extent, even adapted and learned Chamorro to communicate with the locals as part of their missionary work (Faingold, 2017). Still, a large part of the community learned to speak Spanish and used it regularly; in particular people who participated in official matters where Spanish was the main language of communication. Chamorro lived on, alongside Spanish, and was used continuously in the homes and even partially in schools (Stolz, 2010). A great deal of Spanish lexis was adopted into the indigenous language, as we will see in *section 3.8.2 - The Chamorro Language*, but it seems that language death, as it has happened in other, more strictly guided Spanish colonies, was not an eminent threat in the Spanish colonial period.

During the first American colonial period, language policies became much stricter and yet, the Chamorros continued to speak the indigenous language at home. This was the case despite the fact that after the arrival of the Americans in 1898, English soon became the only official language (Thompson, 1947). Schools were ordered to teach in English and the inhabitants were continuously reminded of the benefits that this language would bring them regarding their economic success and personal well-being, as for instance in this article published in the local newspaper:

Ability to speak English helps Chamorros to learn of the big world outside. [...] English is the commercial language of the world. The few who may visit other lands will be fortified in their knowledge of English. They will have the power to converse with foreign people and learn much will be of further help to the people of Guam. English will bring to the people of Guam, through the public schools, a knowledge of sanitation and hygiene, which will enable them to live in a correct manner. This will result still more favorably in the increase in population. Along with such increase will come further and enforced economic development. With economic development will come more of the real pleasures of life. Through English will come a knowledge of fair play-and a keen sense of honor such as the progenitors of Americans had at the time of the origin of the language and such as is practiced by the American nation at the present time. (n.a., 1925, pp. 8-9)

Initial attempts to promote English were unsuccessful. Perhaps this was due to the fact that at that point, the island did not yet have the means to educate the entire population in English, as there was initially simply not enough teaching staff that spoke the language. As a result, a number of Southern villages continued to teach in Spanish and Chamorro (Faingold, 2017), and it was still spoken frequently in homes and at social gatherings (Rogers, 1995).

The effects of the Japanese occupation period on the attitude of the islanders towards the U.S. and the English language were already discussed in previous sections but are restated here, as it marks a significant change in Guam's linguistic history (Barusch and Spaulding, 1989; Kuper, 2014). The longing for the Americans to return, which was also expressed in the song, cited in *section 3.3 – The Japanese Period*, symbolizes a readiness for adaptation. It was then that the shift from Chamorro to English began to take place rapidly. Kuper (2014, p. 38) recapitulates this language shift and critically points out the negative aspects and perhaps false interpretations of this much-celebrated American liberation in Guam²⁰:

The american [sic.] success at reoccupying the island was misconstrued by many of our people as their "liberation." The prevailing narrative on the island is that if it were not for the americans, they would have been killed and had been slaves to the japanese [sic.] people. This "liberation" ideology sparked the strong patriotism associated with contemporary life in Guåhan and also helped to further language decline. In addition to this, the post-war conditions and era of reconstruction/rehabilitation of Guåhan spurred many conditions that were disadvantageous to Fino' Chamoru.

Kuper refers to a spark of strong American patriotism in the second American period, which was confirmed to me during fieldwork, as I discussed the early post-WWII times with my older informants. A Caucasian female informant remembers her high position in school as one of the only American mainlanders in her class at the time:

They were, they were so friendly, they were so pro American first of all and they aspired to be American. They aspired- people with long noses were the pretty people, people with blonde hair, of course, blue eyes are the pretty people, you know, and- but, uh, yet I s- I saw growing up there how proud they were to be Chamorro. (female Caucasian, Gu79f71, born around 1946)

She confirms the literature's claim of a general sense of admiration for the Americans when she had arrived in Guam with her family as her father had accepted a position as a teacher post-WWII.

Apart from interpretations of American political involvement as a heroic act, Kuper (2014) also refers to the "era of reconstruction/rehabilitation" as a driving force for the language shift

²⁰ In Kuper (2014), Guam and the Chamorro language are referred to by their Chamorro names "Guåhan" and "Fino' Chamoru"

from Chamorro to English. What he is touching upon is the changing economic system of Guam around that time, i.e. the shift from farming to a more capitalistic model of employment. Since the American government was then the main employer, for which English was the sole and mandatory language of communication, the Chamorros soon saw the potential of economic success connected to English.

It was in those early post-WWII times that Chamorro parents decided to raise their children, at least to a large extent, in English in order to ensure their economic success (Clampitt-Dunlap, 1995). This meant that the new generation would speak English in almost all aspects of their lives and simply became more confident in it than in any other language. The decline of Chamorro was documented early on in the post-war period, but a complete language shift to English was considered highly unlikely and was not anticipated (c.f. Solenberger, 1962, p. 63). It was therefore not expected that the increasing use of English would soon result in generations of monolingual English speakers, unable to speak the language of their grandparents (Kuper, 2014). Barusch and Spaulding (1989) point to the newly developing issue of a generational gap, where older and younger family members started to become unable to communicate with each other in their mother tongues: “Those who were born and raised on Guam after World War II and especially those born since 1960 have nearly complete proficiency in English; many of these are fluent in English only and unable to communicate in the language of their elders” (p. 66). More recent reports on the language situation in Guam show similar results, with 43% of the population (above the age of five) being monolingual English speakers and only 0.46% of the population reports as being unable to speak English²¹ (U.S. Census Bureau, 2012).

During fieldwork in Guam, I asked a few of my older informants about their personal motivations for speaking to their children in English rather than Chamorro. Many responded that they had found it quite useful to have a “secret language” that they could communicate in with other adults to discuss things that the children were not supposed to hear. Others recalled their childhood punishments in school and said, they did not want their children to go through the same. Many informants also told me that they tried to speak Chamorro to their children, but the children

²¹ The U.S. Census (U.S. Census Bureau, 2012) further reports that 14.7 percent speak another language at home less frequently than English, 20.0% speak another language as often as English, 21.2% speak another language more frequently than English. Out of the other languages spoken at home, Chamorro is spoken by 17.8%, Philippine languages by 21.2%, other Pacific Island languages by 10% and Asian languages by 6.3%

did not understand them, so they switched to English. Some simply found that English felt the most natural to them and they did not make a conscious decision to choose one language over the other.

So when I start having kids, I speak English to- we speak English to them. When they start the Chamorro class in, err, school sp- e- my oldest bro- err son say 'how come mom you don't speak Chamorro to us?' I said- and I explain to him why [then I say]: 'me and your dad speak Chamorro, but you don't speak Chamorro to us.' They have to take Chamorro class in order for them to understand. Up to now they s- understand what's Chamorro 'cause they take Chamorro classes [in] school but they don't speak. (female Chamorro, Gu12f73, born around 1943)

No it wasn't a conscious decision for me, it was just, yeah, it was just the- like a natural- the most natural thing for me [to do] to- was just to, yeah, speak to my kids in- in English. (female Chamorro, Gu19f61, born around 1955)

When I speak to my other daughters they understand, but they cannot speak it. [Said] 'why you have to speak English to them- speak Chamorro,' but they don't un- they understand, but they cannot, they answer you back in English. (female Chamorro, Gu55f83, born around 1933)

Fieldworker: And then do you speak Chamorro to your children?

Gu58f80: Yeah some of my children understand Chamorro, but they're- they're not really that thing, that, err, like, the way I speak, you know, I speak fluent Chamorro, but them, you know, sometimes it's like lopsided [laughs]. (female Chamorro, Gu58f80, born around 1936)

Many older Chamorros were not surprised by my question about their choice of language to raise their children in. They were certain that they were the generation to “blame” for the language shift and many of them felt guilty about not teaching their children the indigenous language: “Yeah, yes, that's- I- that's my fault, mine and my husband's. We should have- it's- we didn't, did we- no, it was an unconscious decision” (female Chamorro, Gu19f61, born around 1955). The strong sense of guilt for losing the Chamorro language is present in both the older generations, who feel as if they failed at passing on their language, and the youngest generations who feel guilty about not becoming entirely fluent in Chamorro, despite the fact that they learned it in school.

The language policies and attitudes toward English and the indigenous language may have affected other ethnic groups in Guam. Filipinos assimilated to the local customs, which initially meant that they were “Chamorrized” (Solenberger, 1962), but as the indigenous community was changing, so did the Filipinos. Barusch and Spaulding (1989, p. 67) stress that American intervention showed its effects “*across* cultures,” including Filipinos. In fact, Mühlhäusler (1992) theorizes that the co-existence of several ethnic groups on Guam has actually accelerated the switch to English, as the language was used for inter-cultural communication. A switch to English was found to be most prominent in those ethnic groups that had a long-standing history on the island, while families that had rather recently relocated to Guam still spoke their indigenous language in the homes (Barusch and Spaulding, 1989). I assume that those parents who considered themselves an integrated part of Guam’s society followed the same trends as the Chamorros and raised their children in English. A Filipino informant remembered his parents switching to English upon their arrival on the island:

It was kind of [] like frowned upon to speak the native language of my parents, only because, I believe, they- they believed anything American was good, so if you didn't speak English, you had no chance of succeeding in life. (male Filipino, Gu85m50, born around 1967)

There are a number of reasons for the shift from Chamorro to English in Guam and with it the shift of many other minority languages to English. Certainly, it is not the “fault” of the post-war generation, but rather, this generation is a reflection of the several changes in politics, language policy and available media and language attitude that ultimately led the shift from Chamorro to the English language.

3.8.2 The Chamorro Language

Among the several languages spoken in Guam, Chamorro is likely one of the most central ones to consider as influential on the English variety spoken in Guam. Aside from English, it is the only other language on the island that is labelled as an official language and, though it can be considered moderately endangered, it is still spoken regularly, particularly by the older generations. The language also enjoys a high status in the community with many locals being proud of their cultural heritage.

Chamorro is an Austronesian language and one of the few Micronesian indigenous languages (along with Palauan) that does not belong to the Oceanic subgroup (Blust, 2000). Topping (1973) categorizes Chamorro as a Philippine-type language, as it shows closest similarities to the Philippine languages Ilokano and Tagalog. It is difficult to determine the origins of Chamorro and its ancient structure in detail, as there are hardly any early records available. The language was not used in written form until the establishment of close contact with Westerners. The first description stems from the Spanish priest Father San Vitores who, in Latin, noted down the Chamorro grammar in 1668, during the Spanish Colonial Period (Topping, 1973, p. 3). After WWII, when Chamorro culture and language became a subject taught in public schools, the demand for an official Chamorro orthography increased and a language commission, *Kumision I Fino' Chamorro*, was established to come up with an official spelling system. Their initial attempts were met with mixed reactions, as the indigenous did not feel comfortable with a prescriptive guideline; particularly because the proposed orthography then was heavily based on Tagalog, which was not well-received by the Chamorros. Since the early 2000s, any regulations on the Chamorro language have been implemented by the Department of Chamorro Affairs (Taitano, 2018), which controls all aspects of Chamorro culture, language, preservation and more. In terms of a linguistic account of the language, much of the available data comes from Topping (1973) and Stolz (2010). Topping has published two works that cover a variety of sociolinguistic features of Chamorro. The following brief description of the language is mainly based on his accounts. For a more detailed description of Chamorro and on-going debates about the language, see the above mentioned references.

3.8.2.1 Lexis

The Chamorro language is heavily influenced by Spanish, due to close language contact during the colonial period. Intermarried families of Chamorro and Spanish origin were often bilingual in both languages (Rogers, 1995, p. 103). Spanish influence is especially reflected in the origin of a great number of lexical borrowings into Chamorro. Rodríguez-Ponga (2002) estimates that around 50 to 60% of the Chamorro lexis, including all word categories, such as nouns, verbs and adjectives, are borrowings from Spanish. Examples are *mes* (“month”), *fiesta* (“party/celebration”), Chamorro *kuanto*, which originates from Spanish *cuanto* (“how much, how many”), Chamorro *potta*, which originates from Spanish *puerta* (“door”). Chamorro *setbesa* comes

from Spanish *cerveza* (“beer”), the Chamorro verb *esplika* from Spanish *explica* (“he/she explains”) and the Chamorro adjective *fotte* from Spanish *forte* (“strong”) (Stolz, 2010; Topping, 1973). Some words of Spanish origin also made it into the active vocabulary of Guam English speakers (see *section 5.1.4 - Lexis*). In Chamorro, the loan words are sometimes modified and embedded in the grammar of the indigenous language. For example, the verb *bumobola* (“to play ball”) from Spanish *bola* (“ball”) is modified with the Chamorro affix and verbalizer *-um-* and the common Chamorro repetition of the first syllable of the base word (Topping, 1973).

There are also lexical borrowings from other languages. Along with cultural customs adopted from the Philippines, the relevant lexis was adopted into the Chamorro language (and later into Guam English): *Tuba*, for example, a beverage made out of the sap of the coconut tree, was introduced to the Chamorros by the Filipinos during Spanish occupation. Other words referring to Filipino-specific dishes are *atis*, *siniguelas*, *kayomito* (all referring to different types of fruit) (Quan C., 2014). Even some Spanish borrowings may have entered the Chamorro language via contact with Filipinos that were brought to the island by the Spanish and had already adopted a variety of Spanish lexis into their own languages.

Few Japanese words were also adopted into Chamorro on Guam, such as *zori* (“slippers”), but according to informal observations by (Chamorro Language & Culture, 2008), the Chamorro spoken in the Northern Mariana Islands, which were in longer and more intense contact with the Japanese than Guam, shows more Japanese borrowings (e.g. *chirigami* “toilet paper”, *denki* “flashlight”).

In more recent years, English lexis has been adopted into Chamorro (e.g. *aircon*), though during fieldwork, I was repeatedly told that English borrowings are simply a sign of the deterioration of Chamorro speaker competence.

3.8.2.2 *Morpho-syntax*

The structure and grammar of the Chamorro language has remained clearly distinguishable from Spanish. This is not unusual, as morpho-syntactical changes in a language likely only occur as a result of extremely close interaction between two groups of speakers (Thomason & Kaufman, 1988) and the Spanish employed rather lenient language implementations on the Chamorros. Spain generally had a flexible linguistic policy in its colonies. While some colonies were governed using Spanish as the main language of communication, in other cases, such as Guam, the colonizers

judged communication to be more efficient if they learned and used the indigenous language of the colony (Echàvez-Solano and Dworkin y Méndez, 2007, p. XViii).

A detailed description of the Chamorro grammatical system would exceed the scope of this chapter. Only a few features are mentioned here, particularly the ones that may have had an effect on the most salient, less standard grammatical forms in Guam English.

Structure: Chamorro is generally a V-S-O (verb-subject-object) language, though it can change to an S-V-O (subject-verb-object) order depending on context and stress. In the examples presented below, the structure changed from V-S-O to S-V-O due to topicalization of the subject.

Ha-fahan	si Maria	i bistidu-ña	gi tenda
Verb: to buy 3 rd person singular	Subject: (the) Maria	Object: her dress	Location: at the store
Maria bought her dress at the store.			

Table 1 - Example of a Chamorro phrase in V-S-O order, based on (Chung, 1990, p. 562)

Si Maria	ha-fahan	i bistidu-ña	gi tenda
Subject: (the) Maria	Verb: to buy 3 rd person singular	Object: her dress	Location: at the store
Maria bought her dress at the store.			

Table 2 - Example of a Chamorro phrase in S-V-O order, based on (Chung, 1990, p. 563)

Pluralization of nouns: There are several methods to pluralize a noun in Chamorro. The most common is the adding of the prefix *man-*. For example, the word *amko* (elderly) is pluralized to *manãmko* (*man* + *amko*). Additionally, there is a list of irregularly pluralized nouns as well as the possibility to add the word *siha* (“they”) following the noun: *leplo*, meaning “book”, turns into *leplo siha* (“books”). Pluralization is, to a large extent, optional in Chamorro.

Tense: Topping (1973, pp. 261-264) reports only two tenses in Chamorro – future and non-future. The future tense is marked with various function words preceding the verb (e.g. *para, bai, siempre*).

Para bai	hu	li'e'	i lahi
Future tense markers: <i>para, bai</i>	Subject: I	Verb: to see 1 st person singular	Object: the man
I will see the man.			

Table 3 - Example of future tense formation in Chamorro with the use of function words *para* and *bai*. Example based on Topping (1973, p. 262)

The future tense verb form may also be used to report past events, when distinguishing an action that took place in less distant past than the other:

Humanao	gue'	antes di bai	hu	fatto
Verb: to leave	3 rd person singular	Future tense markers: <i>antes di, bai</i>	1 st person singular	Verb: to come
He left before I came.				

Table 4 - Example of future tense use in Chamorro in a context that refers to a less distant past. Example based on Topping (1973, p. 264)

Imperative: To form an imperative, the verb is used in the same form as the future tense.

Para	u	gimen	i sebetsa.
Future tense marker: <i>para</i>	Subject: 3 rd person singular	Verb: to drink 3 rd person singular	Object: the beer
He will drink the beer.			
gimen.			
Imperative: drink!			

Table 5 - Example of the Chamorro imperative formation out of the future tense verb form. Example based on Topping (1973, p. 264)

In some instances (for example when a verb contains the prefixes *man-* to mark plurality or indefinite objects), future tense can be marked with the prefix *fan-*. For example *taitai* (to read) can turn into *fanaitai* (imperative: read!) to mark the imperative.

Third person pronoun: Chamorro does not distinguish the third person pronoun based on gender. There are several Chamorro pronoun types that vary depending on their grammatical position, though (eg. *yo'*-type pronouns, *hu*-type pronouns). There is no distinct verb inflection for the third person singular verb form.

3.8.2.3 *Phonetics and Phonology*

The Chamorro sound system is described in detail by Topping (1973). He reports a total of six vowel phonemes (p. 17) and an overall shorter vowel production than in English, as well as the lack of an accompanying glide:

/i/ (with allophones [i] and [ɪ]) Examples: ['hita] “we”, ['lahi] “male”

/e/ (with allophones [ɪ], [e] and [ɛ]) Examples: [op'pi] “respond”, ['pega] “attach”, [mæg'gai] “many”

/æ/ Example: ['bæba] “open”

/u/ (with allophones [u] and [ʊ]) Examples: ['utʃan] “rain” and ['utot] “cut”

/o/ (with allophones [u], [o] and [ɔ]) Examples: [map'pɔt] “difficult”, [op'pi] “respond”, ['tɔktɔk] “hug”

/a/ Example: ['baba] “bad” (Comment: Though described as [a] in Topping (1973), it may also be realized as [ɑ] (Kuper, 2017, personal communication))

If /æ/ or /a/ are unstressed, they are replaced by schwa [ə]

Generally, the higher allophone of the vowels /i/, /u/ (i.e. [i], [u]) is preferred in stressed syllables, unless followed by a consonant in the same syllable. Additionally, there are two diphthongs /ao/ (Example: *taotao* “person”) and /ai/ (Example: *taitai* “to read”). Diphthongs /oi/, /ia/, /ea/, /oe/, /iu/ may occur in loan words from Spanish and English (Topping, 1973, p. 24). Chamorro is the only language in Micronesia and the Philippines that follows vowel harmony, most commonly vowel fronting: back vowels are fronted when preceded by one of several particles that contain a front vowel. /u/ is fronted to /i/, /o/ is fronted to /e/ and /a/ is fronted to /æ/. For example, *guma'* (“house”) turns into *gima'* when preceded by the article *i* (“the”) (see Topping (1973, p. 52)).

Chamorro has 18 consonant phonemes and one semi-consonants (/w/). The following list is adapted from Topping (1973, pp. 26-27), using the current IPA system for information on pronunciation, and examples acquired during Chamorro language courses at the University of Guam.

- /p/ (unaspirated, example: [pæhæru] “bird,” from Spanish “pájaro”)
- /t/ (unaspirated, example: [tata] “father”)
- /k/ (example: [kædæ] “each,” from Spanish “cada”)
- /ʔ/ (orthographic spelling: <’>, example: [yuʔ] “I”)
- /b/ (example: [bæbæ] “bad”)
- /d/ (example: [dagu] “yam”)
- /g/ (example: [gæigi] “here”)
- /ts/ (unvoiced, orthographic spelling: <ch>, considered *one* consonant, example: [tselu] “brother, sister”.)
- /dz/ (voiced, orthographic spelling: <y>, example: [dzædzæs] “tired”)
- /f/ (example: [fæisen] “ask”)
- /s/ (example: [sæʔ] “because”)
- /h/ (example: [hatsæ] “lift”)
- /m/ (example: [mata] “face”)
- /n/ (example: [napu] “wave”)
- /ŋ/ (example: [ŋamu] “mosquito”)
- /ɲ/ (orthographic spelling: <ñ>, example: [ɲalæŋ] “hungry”)
- /l/ (example: [lahi] “male”)
- /r/ (allophones: retroflex [ɭ] in word initial positions, example: [ɭatu] “little while”, flapped [ɾ] in intervocalic positions, example: [pæɾæ] “towards,” from Spanish “para”)
- /w/ (orthographic symbol <u> following a consonant and <o> in diphthongs, example: [rwedæ] “wheel,” from Spanish “rueda”)

The consonants /b, d, g, ts, dz, h, l, r, ɲ/ do not occur in word-final position. /ʔ/ and /w/ never occur at the beginning of a word. The only permissible consonant clusters are: /pl, kl, bl, gl, fl, pr, tr, kr, br, gr, fr, pw, kw, bw, gw, mw, ngw/ (Topping, 1973, pp. 36-37). The Austronesian heritage of Chamorro is responsible for the general consonant-vowel-consonant pattern, but this pattern is regularly broken, particularly in Spanish loan words (eg. *prueba* (“test”), which includes a consonant cluster and a diphthong).

3.8.2.4 *Prosody*

The stress pattern of multiple syllabic words follows a rather straight forward pattern in Chamorro. Generally, the penultimate syllable is stressed, though for some Spanish loan words, the Spanish stress pattern was adopted. Stolz (2010, p. 70) uses the following minimal pair as an example: the Chamorro word *mohon* (“wish,” two syllables) is stressed on the first syllable, whereas the Spanish loanword *mohón* (from Spanish *mojón*, “cairn”) is stressed on the final syllable, which is typical for the Spanish stress pattern. Concerning intonation, Chamorro differs from English in that the stressed syllable is not coinciding with a raise in pitch, but in fact with a lowering of the pitch (Topping, 1973, p. 45). Depending on their geographic region of origin, the stress pattern is commonly recognized as sounding more “rhythmical” for some Chamorro speakers. Particularly the Chamorro speakers from the island of Rota and the Southern part of Guam are pointed out for this feature. Topping (1973) explanation for this is the “more frequent non-terminal junctures which cause more frequent rising and falling of pitch levels” (p. 9) in those regions. The intonational patterns of Chamorro will be revisited again in the discussion of Guam English prosody, as there notable similarities (c.f. *section 5.1.2 - Prosody*).

3.8.2.5 *Language Attitudes and Revitalization*

The language attitudes of Guam’s inhabitants towards Chamorro have changed considerably over the past generations. With the rise of positive associations with English, the value of Chamorro temporarily plummeted, as we have seen in *section 3.8.1 - Language Shift*. The post-war generation was focused on English as the vehicle for success and therefore valued Chamorro less in a professional life. This was particularly the case for women who were newly employed in corporate jobs. Santos-Bamba (2013, p. 90) notes that the post WWII generation “championed the acquisition and use of English and without thoughts of consequence placed the acquisition of Chamorro language in the periphery.” This general disinterest in the native language is listed as one of the main factors that caused the active use of the Chamorro language to drastically decline. However, attitudes toward both Chamorro and English are ever-changing and Chamorro currently enjoys a much higher social status than in early post-war times, and the language is actively promoted in revitalization efforts. In fact, the majority of Guam’s population is in favor of stable English/Chamorro bilingualism (Odo, 1972). Chamorro is regarded as the language that carries

cultural meaning and helps preserve ancestral traditions (Santos-Bamba, 2013). It is a communicative connection to the well-respected elders and with that, carries positive attributes (Barusch & Spaulding, 1989).

Several policies have been put in place to boost the use of Chamorro, with the long-term goal of preserving not just the indigenous language, but the indigenous culture as a whole. Since the 1970s, the Chamorro language program has become public law, ensuring that public schools offer mandatory Chamorro culture and language classes as a graduation requirement (Chamorro Studies & Special Projects Division Missi, n.d.). A Chamorro Language Commission was established in 1964 (and revoked in 1999) with the task to describe and prescribe a written form of Chamorro (Taitano, 2014), which had previously only been an oral language. This was intended as a way of facilitating Chamorro language teaching as well as the development of more Chamorro-English dictionaries to further support the co-existence of both Chamorro and English. The effort put into building the Chamorro school curriculum goes hand-in-hand with a general promotion of the Chamorro culture, for which the Guam Visitors Bureau annually invests considerable funds (Taitano DeLisle, 2016). The goal is to promote local visual art, fiestas, and performing arts, such as Chamorro dances. Particularly Chamorro dances are a reflection of a reviving cultural pride. Original Chamorro dance culture had been lost and was replaced mostly by Polynesian dance styles until the 1980s, when they were newly developed and promoted by locals (Flores, 2002). Today's dances in Guam are therefore modern inventions, but symbolize the efforts being made to revitalize the Chamorro culture. A newly built museum in the island's capitol showcases Guam's cultural heritage. The building is constructed with two large facades, representing an open book. The book's "pages" contain Guam's national anthem and excerpts of a war speech issued by the ancient Chamorro chief, Hurao, who "rallied Chamorro warriors to rebel against the Spanish" (Taitano DeLisle, 2016, p. 568). The texts covering the walls of the museum are all written in Chamorro, reflecting the mission to foster greater understanding of the Chamorro culture (Senator Palomo & Guam and Chamorro Educational Facility, 2018).

Many of the aforementioned efforts to revitalize Chamorro culture and language have resulted in a heightened consciousness in young people to understand the importance of this preservation. However, teaching the language in school has not had the expected effect on the revitalization. Santos-Bamba (2013, p. 91) argues that "the Chamorro taught at school was arbitrary and had little to do with [the students'] daily life. [...] Participants did not recall lessons

that focused on meaningful conversation.” Even though young people in theory put high value on the indigenous language, they feel unable to speak it and even report being ashamed and too insecure to try (pp. 91-92). Polls perhaps underline this attitude, as only 17.8% of households report actually speaking Chamorro at home (U.S. Census Bureau, 2012).

Similar attitudes were mentioned in my conversations with younger Chamorro informants during fieldwork. The sense of pride in the Chamorro heritage and the devastation about potentially losing the indigenous language was a subject that was touched upon in many of the conversations. The locals were very much aware of the promotion of the Chamorro language and they frequently expressed their own role in language preservation. It had been ingrained in them that it would now be up to them to start learning and speaking the language, but they confirmed a doubtful and insecure attitude toward the indigenous language, similar to the accounts of Santos-Bamba (2013). The following reflections by my informants illustrate both a desire to contribute to language and culture preservation, but at the same time also a noticeable insecurity about their own Chamorro language proficiency.

They were trying so hard, pushing it like, okay everyone let's learn Chamorro and- and all that, but I'm- we[re] already passed that critical period where I can't, you know, it's already- we're in middle school, it's like, yeah yeah, it's like, it's- it's not going to stick because it's already, it's already too far past. (Male Chamorro, Gu27m19, born around 1997)

I kind of wish I knew more about the Chamorro culture but it's- I guess now it's up to me to [] try and revitalize it [] in my own way. (Male Chamorro, Gu25m18, born around 1998)

You know I would have loved if they spoke to me in Chamorro because our language is dying. (Male Chamorro, Gu21m51, born around 1965)

Gu15f20: I wish they did I wish they spoke Chamorro with me mmm

Fieldworker: But- and Filipino?

Gu15f20: No they didn't, oh yeah, I wish Filipino too, I wish they spoke- I- I would think I would want Chamorro more 'cause of the island I'm on but- but they have- they didn't, so I would just- I just know like some basic words. (Conversation with female Chamorro/Filipino, Gu15f20, born around 1997)

It's just a dying language, that's all, but I really wish I knew Chamorro 'cause actually it would have been very useful for my pre- when I went to Saip- when we went to Saipan and preaching- oh- I'm talking to them in English they're not interested. Nobody wants to listen but when my partner, who is fluent in Chamorro, starts talking, everybody is listening. I wish I could do that. (Male Chamorro, Gu18m31, born around 1985)

When I was in high school, we did have, umm, no they did teach, err, Chamorro in in high school, they did, and I passed the class with like a B but the Filipinos got like an A, so I was like, okay I guess they speak better Chamorro than I do, you know, but it was funny, but then, you know I di- I did learn enough I think. I learned enough but I do want to learn more. (Male Chamorro, Gu11m22, born around 1994)

Gu22f23: It's because I didn't want to learn, yeah, I had that whole mindset, like, you know, it's not- I'm only hearing this in the class, in my Chamorro class.

Fieldworker: Yeah, you're not using it for anything.

Gu22f23: Yeah it's not- it i- it's not like an everyday language kind of thing, that's the mindset that I had and I feel very terrible for thinking like that right now but, you know, I'm doing something right now so that's- that's where I'm trying to make up for it, so, yeah. (Female Chamorro, Gu22f23, born around 1993)

Those utterances, which all either touch upon a lack of teaching of Chamorro in the homes or an insufficient knowledge of the language acquired in school, are examples of current language attitudes toward Chamorro. Interestingly, similar, positive attitudes toward Chamorro are found in other ethnic groups as well. This Filipino participant, for example, enjoys the sound of Chamorro, though she does not understand much of it. This is despite the fact that she, along with all students attending Guam's public schools, had mandatory Chamorro when she was growing up:

You know it's, it's kind of nice when you hear it, when- at least I do, because I have had patients that come from either Saipan or- and when they speak Chamorro to each other, it's kind of- it sounds nice, I mean, I don't understand it, but, you know- a little bit, very, like, little words, but I can't pick up their whole conversation. (Female Filipina, Gu74f40, born around 1977)

The same speaker remembers enjoying Chamorro class in school:

it's actually a fun class. We would, uh, you know, we would learn it, and you'd have games, so especially in elementary school, we- I- I enjoyed it, I did. And it was always fun because we always had Chamorro week, and it was, you know, like, how to do Chamorro dances, like that, so, yea. And then it would tell us the, you know, like Chamorro legends and so you know. (Female Filipina, Gu74f40, born around 1977)

Despite overwhelmingly positive attitudes toward the Chamorro language and culture, fluent language proficiency is rare in younger generations and it appears that Topping et. al.'s (1975, p. x) prediction still holds true: "If the trend continues, there is a very great possibility that Chamorro will cease to be spoken by Guamanians within another generation." If at all, Chamorro is passed down by the grandparent generation, which appears to be the last generation of active users of the language. It is still being used in songs and religious traditions and many younger Chamorros know a number of everyday phrases (Kuper, 2014). However, they do not appear to be in a position to

pass down the language, which indicates that the current efforts to revitalize the language are ineffective.

The description of the Chamorro language is, despite its decline in use, essential to the present study, as similarities of linguistic features of the indigenous language can be found in older fluent Chamorro speakers, but also (to a lesser extent) in younger generations, even if they are no longer fluent in the language. Discussions about language attitudes and potential reasons for the decline frequently revolve around the co-existence of both Chamorro and English (Santos-Bamba, 2013). Underwood (1989, p. 73) states that, in order to revive the Chamorro language, research needs to be “based on an examination of the English language aspirations and behavior of the Chamorro people, and on the ideology of English as it has developed in the past several decades in Guam.” I will therefore provide a more in-depth summary of the most commonly voiced attitudes toward the different varieties of Guam English in *section 3.8.3 - English in Guam*. In *section 5.1 - Part One - Linguistic Overview of Guam English*, where I present an overview description of Guam English, I will frequently refer back to those Chamorro language structures that appear to have affected the English variety.

3.8.3 *English in Guam*

An in-depth description of Guam English, including linguistic variation in and among Chamorros, Filipinos and Caucasians local to Guam will be the focus of the results chapter of this thesis. Here, I will briefly summarize preceding research that has been conducted on the English spoken in Guam. Most of the available literature revolves around the English spoken by Chamorros, particularly the more basilectal speakers. The vernacular is locally known as *Chaud* ([ʃad]); by scholars it is referred to as *Guam Chamorro Colloquial English* (GCCE) (Quan, 2010) or *Guam Dialect of English* (GDE) (Underwood, 1989). The authors associate this dialect with older or rural speakers of the community. Concerning the phonology of GCCE, (Quan, 2010) provides an extensive list of sounds that she compares to the Chamorro and English sound system (c.f. fig. 16). For the vowels, Quan notes a lack of diphthongization of the FACE and GOAT vowels, and a merged production of KIT and FLEECE, as well as schwa and STRUT. For the consonants, she notes a lack of word-final voicing in /b/, /d/ and /g/ and a stopping of /θ/ in all instances except word-finally, where it is fricated [f]. /ð/ is realized as [d] word-initially, as [v] or [f] word-finally.

/v/ is either devoiced [f] or stopped [b]. /z/ is produced as [dʒ], but as [s] word-finally; /ʃ/ is produced as [s]; /ʒ/ is produced as [s] but as [tʃ] word-finally. She further notes l-vocalization with a glottal component word-finally [wʔ]. Note that this description of the local English dialect is mainly based on the most basilectal form. Aspects of variation and development in Guam English are still under-researched.

English, Chamorro, and GCCE Sound Equivalents Chart		
English Sounds	Chamorro Sounds	GCCE Chamorro EN
Vowels		
a	a	a
*ey / ε	ε	e/ε no diphthong and no contrast
*i / i	i	i / i w/ no contrast
æ	æ	æ
u / U	u	u
*ow / ɔ	ɔ	ɔ w/ no diphthong
ə/ʌ	ʌ	ə/ʌ w/no contrast
Consonants		
p	p	p
*b	b	b but p wd. finally
t	t	t
*d	d	d but t wd. Finally
k	k	k
*g	g	g but k wd finally
*θ	none	t but f wd. finally
*ð	none	d/v/f
ʔ	ʔ	ʔ
f	f	f
*v	none	b/f
S	S	S
*Z	none	ʔ but S wd. finally
*ʃ	none	S
*ʒ	none	S but ʃ wd. finally
ʃ	ʃ (fronted)	ʃ (fronted)
*ʒ	ʒ (fronted)	ʒ / ʃ (fronted)
m/n/ŋ	m/n/ŋ	m/n/ŋ
*l	l	l but wʔ wd. finally
r	r	r
w/j	w/j	w/j

Figure 16 - English, Chamorro and GCCE sound equivalence chart as compiled by Quan (2010, p. 11).

The bulk of linguistic research on Guam English is concerned with language attitudes. As discussed in *section 3.8.1 – Language Shift*, English is associated with economic and academic success as a result of continuous linguistic promotion of English. Santos-Bamba (2013, p. 91) states that “the perception of the quantity and quality in which English was used signified how educated a person was, and quite possibly, his or her social status.” In using the term “quality” of English, Santos-Bamba makes clear that it is not the localized vernacular English dialect that enjoys high value, but that in fact only a more standard variety is deemed acceptable.

Attitudes toward the most basilectal forms of English are reported as both negative as well as more positive. Babasa (1982) has found that children develop a negative attitude toward the vernacular after entering the Guam school system. 3-year-olds, who are not attending school yet, show a preference for the vernacular, but children of 4 years of age and older, who have entered the Guam school system, are found to show a preference for Standard English. She attributes this fact to adults conditioning children to regard Standard English as the language of higher status when they enter school:

It is no secret that adults in our society make pejorative and discriminatory judgements towards GDE (Guam Dialect English) and that they perceive SE (Standard English) as the prestige variety, associating it with higher socioeconomic status and with linguistic superiority. [...] This view would suggest that adults condition young children to regard SE (Standard English) as superior and GDE (Guam Dialect English) as inferior. (Babasa, 1982, p. 1)

The general notion that the vernacular is deemed inappropriate for an academic context is also found in Underwood (1989, p. 76) who likewise makes educational institutions partially responsible for negative attitudes toward “Guam Dialect of English (GDE)”:

In addition to knowing it when we hear it, we also know that the GDE is not considered desirable by teachers and school administrators. The GDE has been labeled broken English or 'pidgin' on Guam, and language programs of direct instruction have been instituted specifically to eradicate the GDE.

More recent research by Quan (2010) argues for less stigmatization of the vernacular. She only reports attitudes regarding it as more “provincial” than the standard variety, but not undesirable:

Because GCCE is associated with Chamorros, who hold positions of political power and have status on the island, this variant of English has no stigma attached to it, except perhaps the label “chad,” or provincial. Younger speakers may prefer the standard (GSE) variant. (p. 18)

Quan bases her argument for less stigmatization toward the basilectal form on the fact that it is associated with being local and Chamorro, which perhaps nowadays is viewed more positively than it was when attitudinal research was done by Underwood (1989) and Babasa (1982).

The more in-depth portrait of Guam English, its internal variation and a potential development toward an American norm (c.f. *Results; Discussion and Conclusion*), will give further insight into possible effects that language attitudes may have had on the English spoken in Guam.

3.8.4 *Philippine English*

A longstanding interaction between the Chamorros and other ethnic groups may have influenced the linguistic development of Guam English. Filipinos make up the largest and longest standing ethnic group on the island aside from the Chamorros and linguistic contact dates back to Spanish colonial times, when they arrived in the role of soldiers and later as deported prisoners. Shortly after WWII, Filipinos were employed as military contract workers that helped build up the island after the destructive war. They have remained an intricate part of Guam's society ever since.

A description of the English language spoken by Filipinos will be the focus of this section. I would like to stress that the research this section is based on, exclusively comes from descriptions of the English variety (or varieties) spoken in the Philippines and not in Guam. The English spoken by the Filipinos born and raised in Guam is most likely influenced by Philippine English but may include many features local to Guam (c.f. *Chapter 4 - Results Part 1* and *Chapter 4 - Results Part 3*). This may also be dependent on the status of Philippine English in Guam and prominent language attitudes toward it, which will be discussed in *section 3.8.4.6 - Attitudes Towards Philippine English in Guam*. The Guamanian Filipino English dialect will be included in the overview description of Guam English.

To comment on the various substrate languages of the Philippines would be outside the scope of this work, as the island state has around 183 living languages, categorized into eight macro-languages, all of which may have been, and still are, influential on the locally spoken English(es) in the Philippines (Lewis, Simons, and Fennig, 2016). Since many of my Filipino informants report of mainly speaking English at home in Guam and only rarely another Philippine language, it is likely for them to have been in contact mostly with Philippine English, for instance with their native Filipino parents.

3.8.4.1 *Socio-historic background*

The colonial history of the Philippines, and with that the linguistic influences on the nation, show similarities to that of Guam. A native population of Austronesian heritage was first colonized by

Spain in 1521, followed by the U.S. in 1898. During WWII, the Japanese occupied the archipelago for a comparatively short period of time with a strong American presence following, once again, after the war. Though the Philippines have been considered an independent nation since 1946, the U.S. remained a dominant political influence (Bolton and Bautista, 2008).

English had been present in the Philippines since the first American colonial period, when American teachers were sent there to train locals in teaching English. Soon, local Filipinos taught classes in English, presumably with a non-native accent, marking the start of a variety of Philippine English that would eventually become nativized. The percentage of the population that claims to speak English has grown from 27% around WWII times to 64% in more recent years (Bolton and Bautista, 2008; National Statistics Office, 2000). Nowadays, Filipinos are considered “one of the largest English-speaking societies in the world” (Bolton and Bautista, 2008). Their high literacy rates (87%) and good command of the English language are main reasons for Filipinos to have a good chance of employment outside of their home country (Jinkinson, 2003, reported in Bolton and Bautista, 2008). As a famous “labor brokerage state”, many Filipinos leave the archipelago in order to find work and higher salaries, mainly in the U.S., including Guam.

3.8.4.2 Philippine English as a Post-Colonial English

The status of Philippine English has remained in a relatively steady position in the various world English models, but shows only few signs of moving forward: it is considered an Outer Circle variety in Kachru’s model (Kachru, 1982; Kachru, 1985), and Schneider (2003) locates contemporary Philippine English in phase 3 (Nativization) of his dynamic model, possibly approaching phase 4 (Endonormative Stabilization). Schneider coincides the entry into phase 3 with the Philippines reaching limited sovereignty, approximately a decade before their actual political independence. Since then, the internal spread of English, its use as a language of business, politics, education and certain forms of media have pushed the development further, perhaps close to phase 4. There is a body of literature in the local variety and there is talk about the codification and standardization of English, particularly in education. However, Schneider interprets Philippine English as a variety that has stagnated in his model, mainly due to the fact that there has been a shift in focus from English and the Western world to more local affairs, including the increasing use of local languages.

Other Philippine English scholars position Philippine English at a higher stage, for instance at “the dawn of stage 5” (Gonzales, 2017, p. 79). They argue that there is a great deal of variation in Philippine English, which will be discussed in the next section, and that this variation fits Schneider’s criteria for phase five, where he positions *dialect birth*.

3.8.4.3 Variation in Philippine English

Scholars of Philippine English underline its great variation across the country’s geographical locations and social groups. Pefianco Martin (2014), for example, leaning on Kachru’s model, argues that there are in fact three circles within the country:

These comprise an Inner Circle of educated, elite Filipinos who have embraced the English language (whether standard American or Philippine English), and actively promote it; an Outer Circle of Filipinos who may be aware of Philippine English as a distinct and legitimate variety, but who are either powerless to support it and/or ambivalent about its promotion; and an Expanding Circle of users of English in the Philippines to whom the language, of whatever variety, remains a requisite condition to upward mobility, but is often very difficult to access. (p. 57)

Particularly the social variation, as mentioned here by Pefianco Martin, is pointed out time and time again in descriptions of Philippine English. Llamzon (1997) describes three sociolinguistic varieties of Philippine English: *Acrolectal Philippine English*, which is commonly used by broadcasters and considered similar to a standard American English. *Mesolectal Philippine English*, which is phonologically different from a standard American English, but accepted as a Philippine variety of English and often used by professionals. Finally, he lists the *basilectal* variety as the one in which Philippine substrate languages are clearly noticeable. Furthermore, Bautista (1996) describes a similar internal variation in her study of three groups of women from different social classes representing sub-varieties of Philippine English. Finally, Gonzalez (2017) distinguishes between various hybrid Englishes that are also marked by social class differences, underpinning that there is not only variation within Philippine English, but also in connection with other languages used on the island. He mentions *Taglish* as the mix between Tagalog and English and *Hokaglish*, a mix between Hokkien, Tagalog and English. He further lists *Conyo English*, which is spoken by upper-class “privileged fair-skinned people” (p. 89), but less smoothly than what is found in Taglish. According to McFarland (2008), there is no one variety of Philippine

English or Standard Philippine English. Code-switching between Tagalog and Philippine English as well as the use of Taglish are very common. In fact, Taglish is “the usual order of the day” (p. 144) in a Filipino communication setting.

3.8.4.4 Prominent Linguistic Features of Philippine English

Keeping its variation in mind, Philippine English has several salient features. Much of the description here is based on the works of Gonzalez (2003) and Tayao (2008), as well as Bolton and Butler (2008) and McFarland (2008). The description is in no way exhaustive, but serves the purpose of giving the reader an idea of the features that are most strongly associated with Philippine English and that may have had an influence on Guam English.

3.8.4.4.1 Stress and intonation

Philippine English is reported as being syllable-timed with a local intonation and having a distinct stress pattern. Stress may be put on the final syllable in words where General American English would put it on the first (e.g. in the word “publish”) or there may be stress on the first syllable, where General American English would put it elsewhere (e.g. in the word “semester”) (Gonzalez, 2003).

3.8.4.4.2 Phonetic features

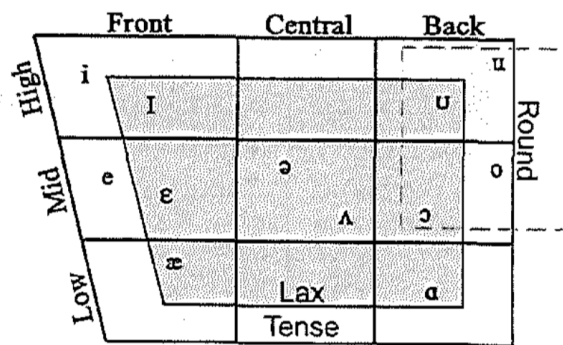
3.8.4.4.2.1 Vowels

The use of full vowels rather than schwa is mentioned as a salient feature of Philippine English, including frequent spelling pronunciation (i.e. “*mountain* /maun-teyn/”) (Tayao, 2008, p. 162). Many Philippine languages have small vowel inventory, which results in coalesced vowel phonemes in Philippine English, such as General American English TRAP and PALM, which are both produced as PALM, or the high front vowel FLEECE, which is used for both FLEECE and KIT. CLOTH, THOUGHT and GOAT are merged, and FOOT is replaced with GOOSE. Tayao (2004) summarizes the Philippine English vowel system in table 6, and Tayao (2008) puts an emphasis on the several variations of Philippine English (acrolectal, mesolectal and basilectal) and compares them to General American English in fig 17.

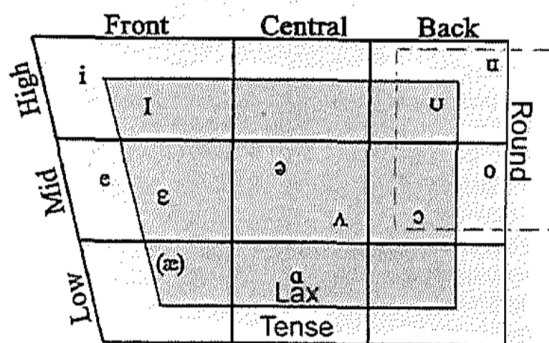
The vowels of Philippine English in terms of Wells's lexical set

KIT	i: > i > ɪ	FLEECE	i: > i > ɪ	NEAR	ɪr
DRESS	ɛ	FACE	eɪ	SQUARE	er
TRAP	ɑ	PALM	ɑ	START	ɑr
LOT	ɑ	THOUGHT	o	NORTH	or
STRUT	ʌ	GOAT	o	FORCE	or
FOOT	u: > u > ʊ	GOOSE	u: > u > ʊ	CURE	ur
BATH	ɑ	PRICE	aɪ	happY	ɪ
CLOTH	o	CHOICE	ɔɪ	lettER	ɛr
NURSE	ɛr	MOUTH	aʊ	commA	ɑ
horSES	ɛ	POOR	ur		

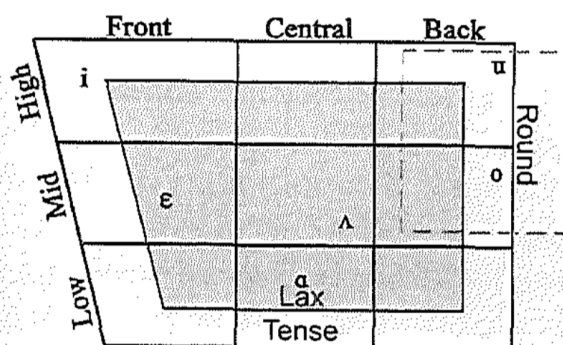
Table 6 - Philippine English vowels, according to Tayao (2004, p. 1050)



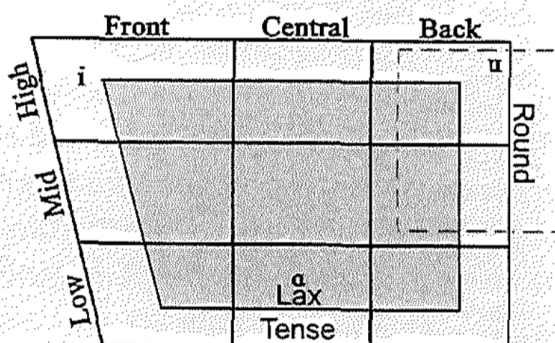
2a General American English



2b Philippine English *Acrolect* Variety



2c Philippine English *Mesolect* Variety



2d Philippine English *Basilect* Variety

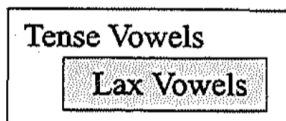


Figure 17 - Vowels in acrolectal, basilectal and mesolectal varieties of Philippine English, alongside General American English according to Tayao (2008, p. 173).

3.8.4.4.2.2 Consonants

Tayao (2008) provides a summary of the consonant system of Philippine English, divided into the several varieties (acrolectal, mesolectal, basilectal Philippine English) in fig. 18. I will point out just a few of the consonant features here, mainly the ones I have also noticed in Filipinos residing in Guam. One of the most salient Philippine English consonant features is the collapsing of /f/ and /v/ into /p/ and /b/ (Gonzalez, 2003). Gonzalez further points out an unvoiced production of /z/

and a tapped /r/. As found in many peripheral Englishes, Philippine English shows unaspirated voiceless stops /p, t, k/ in syllable-initial stressed positions, as well as the frequent replacement of voiced and unvoiced fricatives /θ/ and /ð/ with stops /t/ and /d/.

		Place of Articulation									
		Bilabial	Labiodental	Interdental	Alveoral	Palatal	Velar	Glottal			
MANNER OF ARTICULATION	Stop	p	b		t	d	k	g	ʔ		
	Fricative		f	v	θ	ð	s	z	ʃ	ʒ	h
	Affricative					č	ʝ				
	Nasal	m			n		ŋ				
	Lateral Liquid				l						
	Retroflex Liquid				r						
Glide	w				y						

1a General American English

		Place of Articulation									
		Bilabial	Labiodental	Interdental	Alveoral	Palatal	Velar	Glottal			
MANNER OF ARTICULATION	Stop	p	b		t	d	k	g	ʔ		
	Fricative		f	v	(t)	(d)	s	z	ʃ	ʒ	h
	Affricative					č	ʝ				
	Nasal	m			n		ŋ				
	Lateral Liquid				l						
	Retroflex Liquid				r						
Glide	w				y						

1b Philippine English *Acrolect* Variety

		Place of Articulation									
		Bilabial	Labiodental	Interdental	Alveoral	Palatal	Velar	Glottal			
MANNER OF ARTICULATION	Stop	p	b		t	d	k	g	ʔ		
	Fricative		f	v	(t)	(d)	(s)	(z)	ʃ	ʒ	h
	Affricative					č	ʝ				
	Nasal	m			n		ŋ				
	Lateral Liquid				l						
	Retroflex Liquid				r						
Glide	w				y						

1c Philippine English *Mesolect* Variety

		Place of Articulation							
		Bilabial	Labiodental	Interdental	Alveoral	Palatal	Velar	Glottal	
MANNER OF ARTICULATION	Stop	p	b		t	d	k	g	ʔ
	Fricative		f	v		s			h
	Affricative					ts	dy	ds	
	Nasal	m			n		ŋ		
	Lateral Liquid				l				
	Retroflex Liquid				r				
Glide	w				y				

1d Philippine English *Basilect* Variety

State of the Glottis:

Voiceless	Voiceless	Voiceless
Voiceless	Voiceless	Voiceless

Figure 18 - Consonants in acrolectal, basilectal and mesolectal varieties of Philippine English, alongside General American English, according to Tayao (2008, p. 172).

3.8.4.4.3 Lexis

Considering that Philippine English is a variety that has developed out of contact between Filipinos with various language backgrounds and their colonizers, the Spanish and Americans, it is not

surprising that it includes a variety of lexis that derived from those languages. There are a number of borrowings from Tagalog (*pili*, a tree with an edible nut; *tuba*, an alcoholic drink made from coconut) and Spanish (*pan de sal*, a salty bread; *sala*, “livingroom”) (Bolton and Butler, 2008). Bautista (2000) also mentions changes in the meaning of certain English words (eg. *salvage* meaning “to kill in cold blood”), which perhaps shows that the Filipinos have been in contact with the English language for so long that it allowed for internal development distinct from the U.S.

Not only does Philippine English incorporate a lot of terms from local languages, but the local languages, in turn, have also been influenced by English, which is shown in a number of terms. In Tagalog, for instance, English terminology occurs frequently, but occasionally with alternative spelling (eg. *kendi* for “candy” and *drayber* for “driver”) (McFarland, 2008).

3.8.4.4.4 Grammatical features

There are several papers that discuss the most salient grammatical features of Philippine English (for an extensive list of features, c.f. Collins and Macalinga Borolongan, 2017; Bautista, 2000b).

To name only a few:

- Subject-verb concord deviating from Standard American English (Bautista, 2000b): This is a common feature of World Englishes and can also be found in Guam English (“*my daughter speak*”)
- The omission of the indirect object in cases where the indirect object is necessary in Standard English (eg. in *assure* + ~~indirect object~~ + ~~that~~: “*The President assured he is not merely laying down the basis to declare Martial Law*”) (Casambre, 1986, reported in Bautista, 2008, p. 209)
- The omission of the definite and indefinite article: This is a feature I noticed frequently in the Philippine English speakers I interviewed, particularly in the case of the name “Philippines”, which was often referred to without the definite article *the* (“*When I retire, I go back to ØPhilippines*”)
- Part-whole constructions where the following noun is not pluralized, such as in *one of the* followed by a noun in the singular rather than the plural form (Gonzales, 1983); as I will report in section 5.1.3 – *Morpho-Syntax*, this feature is also present in Chamorro Guam English speakers (“*One of my niece*”)

- Lexis and verb-prepositions combinations altering from Standard English (*open* the light, result *to* > result *in*) (Gonzalez, 2003)
- *get passives* are more common in Philippine English than in other peripheral English varieties, perhaps because of the close contact with American English, where this feature is reported as common (Alonsagay and Nolasco, 2010)

3.8.4.5 *Language Attitudes*

A range of attitudes toward Philippine English are reported in the literature. Most Filipinos are aware of salient Philippine English features and avoid them when speaking to foreigners. The features they are not aware of are used in any context and they are what constitutes the “Filipino accent,” according to McFarland (2008). This does not mean, however, that the general language attitude towards Philippine English are entirely negative. Some scholars emphasize a great sense of pride toward Philippine English, which is particularly noticeable when looking at discussions about Philippine English being an official, standardized variety of English. Bautista (2000, p. 21) writes:

Philippine English is not English that falls short of the norms of Standard American English; it is not badly-learned English as a second language, its distinctive features are not errors committed by users who have not mastered the American standard. Instead, it is a nativized variety of English that has features which differentiate it from Standard American English because of the influence of the first language [...], because of the different culture in which the language is embedded (expressed in the lexicon and discourse conventions), and because of a restructuring of the grammar rules (manifested in the grammar). Philippine English has an informal variety, especially in the spoken mode, which may include a lot of borrowing and code-mixing, and it has a formal variety which, when used by educated speakers and found acceptable in educated Filipino circles, can be called Standard Philippine English.

I would like to point out Bautista’s reminder that language features differing from Standard American English are not automatically interpreted as mistakes. Compared to other post-colonial Englishes, advocates of Philippine English are quite far advanced in accepting and valuing former “mistakes” as part of a newly emerged regional standard, or as (Llmazon, 1969, pp. 90-91) puts it:

Filipinos, for the most part, feel at home in English. They speak it naturally. They do not like their fellow Filipinos to speak it with a put-on and artificial American or British accent [...] Filipinos expect their fellow Filipinos to speak English the Filipino way.

One needs to keep in mind, however, that the standard Philippine English that scholars are frequently describing (e.g. Bautista, 2000; Borolongan, 2009) is really the variety used by educated speakers. The more basilectal forms certainly do not enjoy the same status. The general positive attitude towards Philippine English is still disputed, such as by (Pefianco Martin, 2014) who claims that the American “parent” language is still widely preferred as a standard.

3.8.4.6 Attitudes Towards Philippine English in Guam

As English speaking work forces, Filipinos frequently arrived in Guam, bringing along their own variety of English, which was met with a range of attitudes concerning its prestige. There is no research available that looks at language attitudes toward Philippine English spoken in Guam. However, I assume, based on accounts from Filipino informants, that the lower status of the Filipinos as cheap laborers during the post-WWII reconstruction phase was reflected in people’s attitudes toward their English. One of my older informants, whose parents came to Guam as laborers after the war, remembers that in his childhood, being Filipino was something negative that he tried to hide in his mannerisms and language:

Eva: Did they tease you for [being Filipino]?

Gu85m50: Yes, yea yea

Eva: Was it your English, or no- that was, that was-

Gu85m50: That was just being Filipino, I think.

Eva: Just the fact that you were Filipino-

Gu85m50: Yea yea

Eva: It had nothing to do with the way you acted or spoke.

Gu85m50: No, because I thought my, my actions and mannerisms were very local Chamorro boy but just because they found out I was- and, uh, the famous thing to say was ‘oh you’re Filipino you, you eat dogs,’ you know, so as a young kid, you don’t wanna hear that, you’re- you get so nervous, you, you say ‘I’m not Filipino’ but-

(male Filipino, Gu85m50, born around 1967)

Being teased or bullied for being Filipino seems less prominent among my younger informants, who report feeling like an intricate member of Guam's society. They stress that, although there was some humorous joking about ethnic heritage in schools, they did not feel offended by it:

The things that we did do, however, it was just joking around, it was just kids growing up and having fun. The usual 'oh, you're Filipino'-joke, 'oh you're Chamorro'-joke, but we never really said it with the intention of, uh, discrimination, like, 'hey you're hey you're Chamorro stay away from us.' We never meant it like that 'cause really, at the end of the day, or not even at the end of the day- end of the joke, we're all buddy buddy and, yea, we just moved on. (Male Filipino, Gu86m19, born around 1998)

The same speaker also discusses language traditions in his home that did not seem to consciously push local adaptation. The speaker does not report having felt ashamed of a possible Filipino accent.

It was- they never raised me or my sister 'okay you have to sound like them or make sure you blend-' It was nothing like that, it was always just 'speak right, in a sense that you're speaking understandable and proper English.' 'Cause that was a language that's used and always just 'do good in your studies' and that was it. (Male Filipino, Gu86m19, born around 1998)

Another younger speaker remembers comments from classmates pointing out that her English sounds Filipino. She remembers being called a "FOB," a term that refers to the Filipinos that newly arrived on the island.

Gu87f22: Uh, yea, 'cause sometimes I sound like a FOB.

Eva: Hm?

Gu87f22: A FOB.

Eva: What's that?

Gu87f22: Like my accent comes out.

Eva: A FOB?

Gu87f22: Yea, like a Filipino accent comes out.

Eva: That's called a FOB?

Gu87f22: Yea, I don't know, Fresh Off the Boat.

Finally, a non-Filipino participant that was primarily raised by Filipinos in daycare remembers her English changing and sounding distinctly Filipino. She jokingly refers to the influence as having caused her to have “a weird accent”:

So, growing up, we actually grew up in a daycare center [...] they were all Filipina teachers, yes, so when I was a kid, I said words like coffee, ‘the stomach’ [ðɪ ‘stʌmək], ‘the scissors’ [ðɪ ‘sɪsərs], ‘the coffee’ [ðɪ ‘kɒfi] or ‘pizza pizza’ [‘pitʃɹ], or sitting on the floor with your legs crossed, I thought it was ‘injan tile’ but it was ‘Indian style’. For the longest time I thought it was ‘injan tile,’ but, uhm, yea [...], I guess I had- probably had a weird accent when I was a kid, I don't know [laughs]. (Female Caucasian/Japanese, Gu68f30, born around 1987)

The concept of expat Filipino domestic workers (or in this case daycare employees) influencing language use of local children is frequently discussed in language research. Reden and Wolf (2014), for example, analyzed domestic language use, attitude and awareness in their survey of Filipino domestic workers in Hong Kong. They conclude that the foreign workers play a central role in language teaching to Cantonese children and are often hired because of their English speaking abilities. Others find negative attitudes toward the English used by Filipino domestic workers as their linguistic influence on the local children contributes to the loss of the indigenous language, as for instance in the case of Palau (Pierantozzi, 2000).

3.8.5 Other Languages in Guam

Apart from the main three ethnic groups that will play a significant role in the data analysis of Guam English (Chamorro, Filipino, Caucasian), I want to briefly address the socio-historic and linguistic background of Pacific Islander and Asian groups who have long-standing connections to Guam. The Pacific Islanders residing in Guam, mainly come from the Federated States of Micronesia and Palau and make up a considerable part of Guam’s population. Among those, the most well-represented group is the Chuukese from the Federated States of Micronesia, making up 7% of the population. Among the most well-represented Asian groups in Guam are the Japanese, Koreans and Chinese. (U.S. Census Bureau, 2012)

Chuuk (formerly named Truk) is the most populous state of the Federated States of Micronesia. Residents of Chuuk are allowed to indefinitely reside in the U.S. and its territories without visa and labor certification requirements in accordance with an agreement made with the

U.S. that also includes other states of the FSM, the Marshall Islands and the Republic of Palau (Compact of Free Association) (Gootnick, 2016). As a result of this agreement, a rising number of Chuukese have migrated to Guam seeking better health care, education and social services (Hattori-Uchima, 2017). The newcomers frequently face a number of issues in Guam, as they show higher rates of poverty and lower education levels (Guam Bureau of Statistics and Plans, 2005; Guam Bureau of Statistics and Plans, 2015). During fieldwork, I was quickly introduced to the negative stigma that revolves around “the Micronesians,” who are often othered as the presumed violent and uneducated newcomer. Several informants assured me that Guam was not part of Micronesia, though geographically it is, perhaps because of the negative connotations associated with the region.

Linguistically, the Chuukese add to Guam’s multilingualism, as only 5% speak English at home (Guam Bureau of Statistics and Plans, 2013). There are three closely related languages spoken in Chuuk: Trukese, Mortlockese and Puluwatese (Goodenough and Sugita, 1980, p. xi). These three languages belong to the Eastern Trukic subgroup of the Oceanic subfamily and therefore are considered Austronesian languages. Puluwatese is spoken in atolls west of Chuuk and also in the Carolinian community of Tanapag Village, Saipan (Goodenough and Sugita, 1980, p. xiii). Mortlockese is spoken in all of the islands of Chuuk and shows many similarities to the Trukese language with only few but significant differences, for example in the phonological repertoire (Mortlockese is theorized to have twelve distinct vowels whereas Trukese only has nine) (Goodenough and Sugita, 1980, p. xi). Trukese is considered the local language with the largest number of speakers.

One linguistic feature of Trukese, for example, that is to some extent also found in Chamorro, is reduplication that influences the meaning of the verb. Three distinct reduplication processes are found in Trukese: a total reduplication, a reduplication of the initial syllable and a doubling of the initial consonant. A doubling of the initial consonant, for example, turns the verb into the passive voice (*ppos* “be stabbed” versus *posu-u-w* “stab him”). Reduplication of the first consonant and the first syllable signifies habitual behavior (*fáffátán* “be accustomed to walk” versus *fátán* “walk”) (Bybee, Perkins and Pagliuca, 1994, p. 173; Goodenough and Sugita, 1980, p. xxiii).

Another well-represented group in Guam are Asians, among which the U.S. census lists Chinese (except Taiwanese), Japanese and Koreans as the most populous groups; each group making up around 1.5-2% of Guam's population. Japanese residents are mainly associated with business ownership (Betances, 1980) and young Koreans make up a large percentage of Guam's private schools, where they are enrolled to learn English as one of their main objectives (Kim, 2015). One of the most prestigious private schools reports 23.2% of their students being Korean, followed by 11.5% Chinese students and 7.9% Japanese students, outnumbering Chamorro and Filipino students (6.2% and 7.7%) (St. John's, 2019).

Although Japanese and Koreans make up a considerable number in terms of permanent residency, these groups are mainly discussed in the media as short-term visitors connected to tourism. According to the most recent reports, the Japanese still represent the biggest group of tourists, making up 55% of all visitors to the island. It is therefore not surprising that a lot of my informants who work in the tourism sector have learned basic Japanese in order to better communicate with the customers. Korean visitation to Guam is on the rise, having grown more than three-fold in the past years (Tourism Satellite Account, 2016). The locals are therefore rather frequently in some contact with those languages though they are not speaking them fluently as a whole.

In this chapter, I have given a broad overview of Guam's colonial past and have presented several factors, such as the varying education system, media presence and outside language influences that potentially had a significant effect on the linguistic developments on the island. All three colonial powers have shaped Guam's language in their respective ways. The Spanish presence (1521-1898) notably marked the lexis of Guam's indigenous language, which, in turn, has shaped the local English variety (c.f., for example, *section 5.1.4 - Lexis*). Chamorro remains influential on Guam English, despite the fact that the language is no longer prevalent, as I will show in the results and discussion section of this work.

The Japanese occupation period (1941-1944) was short and comparatively less relevant in regard to the spread of the Japanese language on the island. It was, however, a significant time period, as the eventual return of the U.S., putting an end to the militant Japanese era, was viewed as a heroic act of saving the island and its people. Consequently, attitudes towards the returning

colonizer, the U.S., were highly positive and created the favorable environment that led to a language shift from Chamorro to English.

The two American periods (1898-1941 and 1941-present) significantly contributed to shaping the island and its people into the way it is today, which is noticeable not only in the cultural mannerisms of the indigenous, but also in the current language situation. Strict implementations in the education system helped advance English proficiency quickly. Maintaining the idea that English would be the vehicle to success further reduced the use of Chamorro, which is currently no longer regarded as having material advantages and appears to be used mostly to signal cultural belonging.

There are many nationalities present in Guam. Aside from the Chamorros, the Filipinos, mainland Americans, other Micronesian islanders, Japanese and Koreans all contribute to a cultural diversity. Yet, or perhaps *because* of this diversity, English is the most powerful and most frequently used language, with 44% of the population living in households where it is the only language being spoken (U.S. Census Bureau, 2012). The cultural diversity has most likely influenced English in Guam to become a distinct variety; one that has not yet been described fully or in great detail. In the following chapters, I will provide a first description of Guam English, both with a general overview of many aspects of the language, but also with a more in-depth and quantitative analysis of Guam English short front vowels and case studies of individual speakers.

4 Chapter Three – Methods

In this chapter, I will discuss the methods that were employed for data collection and the subsequent linguistic analysis of Guam English. This includes comments on preparatory work before fieldwork and methodological decisions made concerning the sample type and size, which was mainly based on relevant social factors that stratify Guam's community (e.g. sex, level of education, ethnicity, age). It further includes strategies that were followed during fieldwork in order to recruit representative speakers of Guam English and to optimally record their speech. Finally, I will discuss the methods employed to analyze the collected speech data, which entailed careful data processing for both the overview analysis of Guam English, as well as the quantitative analysis of the short front vowels. The latter was done using automated vowel analysis, for which a detailed description of data extraction and cleaning strategies will be given.

4.1 *Preparatory Work*

Before embarking on the initial research trip to Guam, extensive preparatory work was done. Studying Guam's history and culture carefully was a necessary first step in order to be well prepared for the time-limited fieldwork and to refine the research questions as closely as possible, while keeping an open mind for potential necessary changes that may arise on site. This preparatory work also in part contributed to the answering of the first research question, *How did English emerge on Guam, socially, historically and linguistically?* as it helped establish a connection between historic events, particularly in connection to colonialism, and potential linguistic development on the island. It further laid the groundwork for the definition of the speech community and the targeted sample size.

Initial contacts with potential informants were established early on, with local gatekeepers that were already contacted before the research trip: Through project presentations at various institutions in Switzerland, I was able to find connections to essential contacts in Guam. After a presentation at the University of Bern, for example, I was approached by a university student who had a social connection to Guam. She had been a contestant in a Miss Earth beauty pageant years prior and had become friends with a former Miss Earth Guam, whom she was able to put me in contact with through social media. This newly established contact, which later turned into a great

friendship, became an invaluable source of information about the island's culture and social connections, and led to the encounter of more potential informants.

4.2 Data Collection

The majority of the speech data for both the overview description of Guam English and the quantitative analysis of the short front vowels was collected in June and July of 2016 and in August, September and October of 2017, during my fieldwork trips to Guam. During both fieldwork trips, I stayed in a residential area in the central part of the island, only a short distance away from the island's most touristic areas, where a majority of the local shops and hotels are located. A rental car ensured my mobility on the island so that I was able to visit participants in all areas of Guam. I rented a room from Caucasian Americans who had moved to the island from the mainland U.S. for work. I soon learned that the close connection to mainland Americans did not necessarily encourage access to the local, indigenous community. Social contact between the two groups continues to be limited, as especially White temporary island residents from the mainland are viewed as outsiders. The research affiliation with the local university, as well as attending Chamorro language classes in addition to the previously made connections with local gatekeepers facilitated access to the local community much more. Learning the basics of the Chamorro language proved to be unnecessary for communication with locals of any age group, as English is the initial language of contact in any generation. It did, however, facilitate the linguistic analysis at a later stage, and it provided much insight into the exploration of potential substrate language influence on Guam English.

4.2.1 The Speech Community and Sample

In order to collect representative data during fieldwork, I had to first define the speech community that would then form the baseline for a sample of informants for the project. This was not a straightforward task and heavily depended on the social stratification of the research site.

Labov (1972a, pp. 120-121) defines the speech community as a group of people that share linguistic norms and behaviors. This does not mean that everyone in the selected network has to share those same language features. In the case of Guam, as there is virtually no published linguistic research, it was unclear which language features the informants would in fact portray.

Generally, members of a speech community will share a common understanding of the social meanings of a range of linguistic variables, and they may implicitly know of the extent and the manner of language variability (Dodsworth, 2014, pp. 263-264). According to Weinreich, Labov and Herzog (1968), this variability follows an “orderly heterogeneity,” meaning that the differences among speakers are not random, but determined by a set of social or linguistic features such as the speakers’ ethnicity, age, level of education and gender, mobility and the linguistic context of a certain variable.

This leads me to define the speech community for Guam as the variable group of inhabitants associating with one of several ethnic groups, among which the most well-represented are Chamorros, Filipinos and Caucasians (Caucasians with a family history dating back to the U.S. mainland). Because these ethnic groups all generally go through the same school system²², based on American standards, I assume that the speech community shares, at least to a considerable degree, a mutual understanding of the social meanings of language variation in Guam English. The speech community includes speakers of all ages and educational backgrounds as well as both genders, male and female.

To select a representative sample of speakers from this speech community, a less traditional dialectological approach was chosen. Traditional dialectology had a rather narrow idea of what makes an ideal sample of study participants and focused on collecting data mainly from non-mobile, rural, old, male speakers (NORMs). They were believed to be less connected to outside influences and to employ the least innovative language patterns. In more recent years, social science has come to see that remote, isolated and in a way “pure” populations rarely exist and may never really have existed (Montgomery, 2000; Trudgill, 1989). In fact, more recent studies generally include the much more common group of participants that are of a wide range of socio-economic statuses, levels of education and mobility patterns that have regular contact to non-local speakers (Milroy and Gordon, 2003, pp. 16-19). The speech sample was aimed to include speakers of various social backgrounds, focusing mostly on range of ethnic groups, ages, education levels and both genders. Regarding the speakers’ mobility, they were required to have spent their formative years on the island and to have left, if ever, for only a limited amount of time (a few

²² Some degree of segregation is still present on the island, as families of wealthier backgrounds are likely to send their children to private schools that do not follow the same curriculum as the public school system. However, the schools are all generally based on American standards.

years maximum). The general preference for less mobile study participants follows a more traditional sampling approach, which was decided on based on the phrasing of the research questions, which are primarily concerned with the English spoken by long-standing locals of Guam, as opposed to residents from outside regions.

4.2.2 *Sample size*

The number of participants recruited for the study was largely dependent on the limited amount of time spent on fieldwork, the ability to reach people and inform them about the project and the willingness of the islanders to participate in a language research project. Many of the informants were contacted through personal connections. This made it easier for me to gain their trust, which encouraged a positive attitude toward the project and eventually allowed for a relaxed conversation setting. As a consequence, however, the study sample size is comparatively lower than what you may find in other fields of study, a phenomenon that is relatively common in sociolinguistic research and not necessarily considered a disadvantage (Buchstaller and Khattab, 2013). According to Sankoff (1980) and Meyerhoff and Schlee (2010), around five speakers per age and gender group are considered sufficient to draw statistically reliable conclusions without adding unnecessary burdens of data collection, handling and storage. Many conclusions can be drawn from a limited amount of informants, for instance by virtue of having several hundred language tokens available for analysis per speaker.

For accurate linguistic analysis with the inclusion of various social factors, a *balanced sampling strategy* (Dodsworth, 2014) was employed. This means that around the same amount of speakers for each gender category, several age groups and various levels of education were sought out. The following section will discuss in more detail the sort of social factors that were specifically relevant in choosing participants for the study.

4.2.3 *Ethnic Groups*

As discussed before, there are a number of ethnic groups residing in Guam, which has led to its reputation as a melting pot of many nations. The linguistic contact between some of those ethnic groups is long-standing and dates back to the beginning of the Spanish colonial period. Especially the indigenous Chamorros and the Filipinos have long been co-inhabiting the island and many of the residents consider themselves bi- or multi-ethnic. It can therefore be problematic to define

exclusive ethnic categories such as “Chamorro”, “Filipino” or “Caucasian,” as it is unclear on what grounds this definition may be based. There is fluidity in the concept of ethnicity, which leads to the general assumption that there is a performative aspect ascribed to ethnicity: Ethnic identity can be “shaped and re-shaped on an on-going basis during conversational interaction” (Schilling-Estes, 1999, p. 137). Keeping this in mind, I deemed it most appropriate to rely on the participants’ self-identification of their ethnicity. During the analysis and whenever strict ethnic categorizations are employed, I would like to remind the reader that this does not automatically entail that the entire ethnic group is expected to perform homogeneously or even to have the same understanding of what it means to self-ascribe to a specific ethnic group.

The Chamorros represent the majority of informants for the study and are the main ethnic group considered for the quantitative analysis of the short front vowels. The choice to focus on this group was based on several reasons: although historic accounts argue that the Chamorro ethnic group was decimated by 90% and practically extinct during the early stages of Spanish colonialism, a large number of today’s population in Guam still proudly identifies as Chamorro. The Chamorros represent the indigenous population on the island and, according to the 2010 census, make up a plurality of the population. Though other ethnic groups have been on the island for generations, the Chamorros’ cultural customs and language is celebrated and taught in schools as the island’s long-standing and original historic background. The development of English in this ethnic group is especially interesting to study as an almost monolingual English speech community has only recently emerged, represented by the younger generations, while the oldest generation still speaks Chamorro as a first language.

Apart from the Chamorros, I included two more ethnic groups in order to better grasp the complexity of Guam as a melting pot society. The two additional ethnic groups were included in the overview analysis of Guam English and the case studies, but only in the form of smaller corpora. For both Caucasian and Filipino participants, mobility and a long-standing connection to the island had to be treated in a more flexible way. Many Caucasians only arrived on Guam after WWII, which meant that the oldest segment of the dataset was likely to have spent some formative years on the U.S. mainland before coming to Guam. Similarly, although Filipinos have been on Guam since Spanish colonial times and many are intermixed with the Chamorros, a large wave of Filipino workers arrived post-WWII to help build up the island after the destructive war. Consequently, the older Filipinos that could be recruited for the project had spent some of their

formative years away from the island. The younger speakers of both ethnic groups, on the other hand, were born and raised as Guamanians.

4.2.4 *Age*

The speakers' age was an essential social factor to consider for this study. To portray generational differences and potential ongoing changes in Guam English, I make use of an apparent time model, an important tool in the study of linguistic variation and change (Bailey, Wickle, Tillery and Sand, 1991). This method is based on the assumption that, after having reached young adulthood, a speakers' language remains relatively stable across their lifespan. It assumes that today's older speakers represent the language as it was spoken during the time they acquired English and the younger speakers represent language use of their respective generation. A comparison of various generations then gives insight into the general patterns of language change over time. Although there is always the likelihood of a certain amount of intra-speaker change across the lifespan, this model is well-established in the field of linguistics and has proven to be reliable and to accurately reflect the nature of language change (Fruehwald, 2017).

With this method in mind, all age groups above the age of 18 were generally approached and considered for the study. Speakers below the age of 18 were included only with consent of a caregiver. During data collection, the speakers' age was purposely treated as a categorical factor, in order to create a relatively evenly distributed sample of all age groups²³. Four age groups were defined: 13-20 year olds, 20-40 year olds, 40-60 year olds and 60+ year olds. A minimum of three speakers per age group was targeted, which is in accordance with Tagliamonte's (2009) suggestion regarding an appropriate number of participants per cell. Most age groups included more than the minimally required number of speakers. Especially the category of 25-30 year old speakers was comparatively larger than any of the other age groups, which was likely due to the proximity to my own age, making it more likely for me to get in contact with that age group. It may also be because this represents the age group of university students and young professionals that showed great interest in academic research in general, and especially in this project. Harder to find were

²³ In the quantitative analysis of the short front vowels, the age factor was eventually treated as a continuous rather than a categorical factor.

older Chamorro males who met the study requirements, as many had left Guam for the larger part of their lives due to military service.

Speakers below the age of 18 were not actively sought out. This was mostly due to the project's ethical guidelines, which favored parental approval for under-aged participants. For the few under-aged participants that were approached to participate in the study, the parents' consent was given and a family member or guardian was present during the interview. One also needs to keep in mind that adolescent speech has been shown to be particularly likely to employ a degree of age-grading, meaning that a certain language pattern can be adopted for a few years and later abandoned (Milroy and Gordon, 2003; Chambers, 1995; Tagliamonte, 2012). Such patterns may not follow the structure of what is usually assumed to be a systematic change documented in an apparent time model.

4.2.5 *Sex and Gender*

In traditional dialectological research, the focus has mostly been put on male speakers, as they were believed to employ less innovative language forms than women. According to Schilling (2013) "women have been seen as less 'authentic' than men because they often have wider contacts and tend to orient toward wider language norms rather than localized linguistic forms" (p. 186). The inclusion of female speakers in linguistic research, however, has since then become common practice. In fact, female speakers have been the sole focus of several dialect studies (cf. Mendoza-Denton, 1997).

The inclusion of both sexes in a dialect study entails that one needs to expect significant differences between male and female speakers (Labov, 1990, p.205; Coates, 1986). Those differences can either be due to biological gender attributes, in which case the term "sex" rather than "gender" is used to discuss male/female differences. Biological differences between men and women in connection to their speech organ are well-researched and there are a number of methods to account for those biological differences (see *section 4.3.5 - Normalization*). *Gender* differences between men and women refer to the social roles ascribed to each sex. Women are generally reported to employ more standard-like and socially favored speech (e.g. Cameron and Coates, 1988; Trudgill, 1983; Fasold, 1990), as well as speech that applies to wider geographical regions (Cheshire, 2002, p. 420). They are also reported to be more sensitive towards employing prestige forms (Labov, 1972a). Many of those findings have been interpreted in the context of gender roles

in society. Among others, a frequent explanation is that women may be in a less powerful position, economically and socially, and therefore use more prestigious language in the form of a “symbolic capital” to counteract this position (Trudgill, 1972). However, one needs to keep in mind that gender differences are by no means predictable, which is shown by a number of studies where women do not follow the expected pattern of being more standard (Fasold, 1990, p. 92). Especially in doing research on lesser known varieties of English, the social position of women may not be directly comparable to generalizations in the Western world. The Chamorro ethnic group, for instance, historically formed a matriarchal society, putting women at the center of decision making. Their position in society and its influence on the language therefore may vary significantly from what has previously been reported on language and gender roles.

In addition to variable gender differences between men and women, gender-internal variance is also likely to occur. Much research points towards great heterogeneity within the categories *Male* and *Female*: Mallison and Childs (2004; 2007) for example, point out the differences in female African Americans of an isolated Appalachian community that can be traced back to their social behavior (“church ladies” and “porch sitters”). The two groups of women show different linguistic behavior as opposed to a homogenous “female” pattern.

Keeping the linguistic complexity intertwined with gender roles in mind, I sought out study participants simply according to their biological sex. I based the distribution of male and female study participants in the sample on the male/female distribution of Guam’s general population, which is almost 1:1 (male/female ratio across the lifespan= 1.03) (n.a., 2017). I therefore collected around 50% male speakers (44 participants) and 50% female speakers (45 participants). Matching the distribution of male/female study participants to the general population census is in accordance with what Schilling (2013) suggests as an appropriate sampling method for this social factor (proportionate stratified random sampling method).

4.2.6 *Level of Education*

Education is an important factor to consider when looking at potential social influences on language. Schools represent an opportunity for the islanders to interact with, and consequently be influenced by social groups outside of their immediate social network. I considered two factors with regards to the participants’ education: the *level* and *type* of schooling.

There are several educational levels that Guam residents can reach locally, without having to necessarily relocate to the U.S. mainland or a larger island. Apart from primary education, secondary schools and even several tertiary schooling options are available. I intended to include various education levels in the speaker sample. It is a common issue in dialectological research that more highly educated groups make up the majority of many corpora, although it is commonly assumed that the lower classes show the least standard versions and potentially most locally relevant dialect (cf. Trudgill, 1983). Though there are a number of speakers with lower levels of education in the sample, college graduates, i.e. speakers with a tertiary education, undoubtedly make up the majority (55 out of 89 speakers)²⁴. This is in part due to the places I chose to get in contact with locals (the local university, libraries and cultural centers), where more highly-educated people tended to gather. It may also have to do with people with higher levels of education being more willing to participate in scientific research. As a result, my sample is slightly skewed towards speakers with higher levels of education and therefore likely to include fewer instances of vernacular speech.

4.2.7 *Other Social Factors*

Several other social factors potentially have an effect on language, but played a less central role in the design of this study, as they were not included as social factors in the quantitative linguistic analysis. The statistical model for the short front vowel analysis, which will be explained in more detail in *section 4.3.3 - Quantitative Analysis of the Short Front Vowels*, required limitations to the number of added variables in order to work reliably. The type of education of the participant, the mobility pattern, the social network, the region of origin within the island, attitudes towards English and the U.S. and potentially many more factors could all influence Guam English. These factors were by no means ignored and did play a role in the interpretation of Guam English as a whole, but they are treated separately here, as their effect is either not a primary interest in the research questions regarding the quantitative analysis, or a similar effect can be measured by means of including a different social factor instead.

²⁴ For some speakers, there is no information available about their level of education. Some of the younger participants may receive a higher degree as they continue their education.

4.2.7.1 *Type of Education*

In addition to the level of education, the *type* of schooling also stratifies Guam's population. Guam distinguishes mainly between private and public education. Private schools, including schools funded by the military and parochial schools, generally have more funding options and therefore are said to provide more resources for the students. Public schools are reported as being directed more toward lower socio-economic groups, which is reflected in the high percentage of public school children qualifying for free or reduced cost lunches (97% of students qualified for free lunches in 2011) (Guam statistical yearbook, 2011). Based on reports from locals, the different types of schools occasionally, but not always, entail variable ethnic stratification. In Guam's most expensive private school, for example, Chamorro and Filipino students are outnumbered by non-locals from Asian countries (St. John's School, 2018). Depending on the type of schooling a participant attended, more or less contact with classmates of different ethnic groups can be assumed. This contact has a potential for linguistic influence. The following participant, for instance, was made aware of her ability to style-switch between a more Guam-oriented variety and a more general American style through her experience at military school:

Or, uhm, I don't know, sometimes, like, friends from mil- from the military school would follow me to like family events, or like they know my family, and afterwards they'd talk to me and they're like you know your accent kind of changed or- I don't know it's just, yea. (Female Chamorro, Gu47f17, born around 1999)

The type of education was considered an influential factor on Guam English as a whole, but it was disregarded in the quantitative analysis of the short front vowels in order to keep the number of influential factors manageable and under the assumption that level of education would give sufficient insight into the speakers' educational background.

Education type was assumed to be connected to the speakers' socio-economic class, which was not a primary focus of this study due to the vagueness of the term. Socio-economic status is often considered as a factor that combines the speakers' education and their income. It is a complex attribute and it is difficult to determine the position of a speaker in society based on their education, profession or income. Different cultures value different professions as more or less prestigious, and there is often no clear connection between prestige of a profession and annual income

(consider some of the lower ranked academic positions, for instance, where prestige is relatively high, with a comparatively low annual income). In some communities, such as the more traditional indigenous groups of Guam, social status may be determined by someone's age (elders enjoy a high status in the Chamorro community) or their general knowledge about the indigenous culture and traditions, rather than their profession or annual income. Based on those reasons, social class was not considered as a social factor in the quantitative analysis of the study and with it, neither was the type of education. Instead, the *level* of education was considered as one reliable indicator of the speaker's social background.

4.2.7.2 *Mobility*

Traditional dialectology has mainly focused on non-mobile informants to describe a dialect region. Even in more recent research, as Britain (2016, p. 222) argues, “mobility is either ignored, seen as peripheral to models of linguistic change, or positively shunned and treated as suspect.” In reality, non-mobile study participants represent the great minority of any speech community, and mobility in various forms has become the norm. Apart from the rather visible nomadic behavior of refugees or “cosmopolitan jetsetters” (p.237), the greater part of a speech community engages in some form of “local mundane mobility” (p. 237). *Local mundane mobility* refers to the routine, perhaps banal, everyday movement of people as they, for example, commute to work, the grocery store or to meet with friends. This aspect of mobility is often unaccounted for in linguistic research, but is nonetheless highly relevant, as Britain argues. Additionally, there is a differences between physically mobile people and technologically mobile people, i.e. those people who are so engaged in online media consumption that their cognitive “mobility” oriented toward another geographical area approximates the language influence of that of physically mobile people. Hess (2017) finds interesting tendencies in her analysis of an English speaking community from the island of Saipan, located in close geographic proximity to Guam. She finds that the younger generations who are technologically mobile and in constant contact with electronic content coming from the U.S. linguistically behave similarly to the older generation, which was physically mobile and had left the island for longer periods of time to go to the U.S. Whether similar tendencies may be true for the more mobile people in Guam could be an interesting focus for further research.

Guam residents are highly mobile in various forms, both in a mundane, everyday form, as well as on a grander scale. Local mundane mobility is mostly shaped by work commute, as most

commercial jobs, supermarkets, bars and recreational centers are located in the center of the island. Many islanders are used to a daily commute if they live in more rural parts of the island. With heavy traffic being quite common, especially during rush hour, locals often spend hours on the move. This type of mobility was accounted for in the present study by choosing, whenever possible, interview locations that were relevant anchor or target points to the informants' daily mobility. This could include their homes, workplace, a place where they usually stop to get coffee, a park where they have lunch or a construction site where they complete a temporary project.

Mobility on a larger scale is also common on the island as many regularly visit the U.S. mainland for longer periods of time. Especially a move for education has become desirable (Kehoe, 1975), resulting in a growing part of the community spending at least 4 years of their lives off-island for college. Additionally, a highly mobile generation of Chamorro men has left the island due to military service, particularly in connection with the Vietnam War. The dataset used for the present study only includes a limited number of older Chamorro men, because most were considered too mobile to qualify for the study, as they had often spent most of their professional lives off island due to military service. In hind-sight, I would argue that this group, the older, mobile Chamorro men, should be included even in a study that focuses on less mobile people. This is simply because the mobility of those men represents the majority of the male population at the time. During the Vietnam War, Guam had a population of approximately 40'000 males 14 years or older (30'978 males in 1970 according to United States Bureau of the census (1973)). Over 6'000 of those men were enlisted in the military and fought in the Vietnam War (Ward, 2018). This makes up 15% of the male population and assumingly a much higher percentage of the men that were between the ages of 18 and 45 at the time of the war, i.e. today's older male population. Since mobility is apparently the norm for the older male population, it therefore should be accounted for in future studies of language on Guam English.

Less extensive mobility patterns were of interest for the overview analysis of Guam English and especially with regards to the third research question, concerned with possible linguistic convergence towards American patterns of variation. With the U.S. being a main target for mobility, it is also likely to be a target for linguistic assimilation. The specific geographic regions that Guam residents are likely to move to when migrating to the U.S. were treated as an indication for potential regional language assimilation.

Although informants having spent longer periods of time off-island were also included in the present study, less mobile people were generally preferred. The research questions were formed in a way that would allow for only a limited degree of mobility, meaning that the informants were expected to have spent their formative years in Guam. This was decided on because the focus was put on studying the emergence and development of the local dialect spoken by the people that had acquired their English in the research site. This is in accordance with much of past linguistic research of a similar scope, where study participants were usually expected to have spent a majority of their lives in the region of interest, but particularly between the ages of eight and the beginning of adolescence (cf. Labov, 1966). Furthermore, the sample studied here is already heavily stratified through the inclusion of several ethnic groups, levels of education, age groups and both sexes, and therefore limitations were set to the mobility factor, in order to collect a corpus that would be suitable for quantitative analysis (c.f. *section 4.3.3 – Quantitative Analysis*).

As discussed before, an increased level of mobility was accounted for in the two additional corpora, i.e. the Filipino and the Caucasian American samples, as the personal history of those speakers often suggested rather frequent moves between Guam and their family's place of origin. Including highly mobile speakers and even some that did not spend their formative years in Guam reflected the reality of the mobility patterns of those groups. Britain (2016, p. 11) argues that “non-local mobile members of the community can be at the vanguard of language changes that affect longer-term members of the same communities.” The additional analysis of those two rather mobile ethnic groups could therefore potentially provide information about the outside linguistic influences that Guam's inhabitants most frequently come in contact with.

4.2.7.3 Local Region of Origin

A social factor that shows potential to explain variation in Guam English is one that will received relatively little attention throughout this thesis. It is the potential effect of the participants regional origin within the island on their vowel production. On several occasions, I was told by participants that Guam English can vary depending on the speaker's region of origin:

This- this small island has different accents. For different villages even, and it's- it would be a little silly to say that there's only one Chamorro accent. (Young male Caucasian, Gu80m28, born around 1989)

It appears that particularly speakers from the Southern-most villages on Guam, which are much more rural than the central areas, are said to employ more non-standard speech, likely influenced by the substrate language. This is likely due to the fact that the Southern villages of Guam are said to be more provincial and more preservative of the Chamorro culture. I was under the impression, however, that the English spoken by Southern Chamorros was not systematically different from that of the North but perhaps included a slightly higher frequency of some of the non-standard features.

4.2.8 *The Individual Speaker and the Community*

Much recent variationist sociolinguistic research factors in the reality that speakers of any community will show community language patterns but also a great deal of inter-speaker variation (Coupland, 2007; Johnstone, 1996). While part of the current research project includes social categorizing of the speech community (e.g. categorizing speakers into different ethnic groups or levels of education), it is important to keep in mind that no one individual speaker can simply be reduced to objective social categories and is in fact expected to show a range of unique patterns within the broader community patterns. I made an effort to value individuals' patterns of variation and will attempt to show examples of this throughout the thesis, particularly when discussing the case studies of four speakers who belong to the same sex and age group but show great differences in their individual language production (c.f. *Results, Part Three – Case Studies*).

Valuing the socio-linguistic profile of individual speakers in light of community tendencies further contributes to the deeper understanding of a language variety. Or, as Schilling (2013, p. 27) puts it:

As fundamental as individuals are, linguistic features cannot get their social meanings in a vacuum, and so we must always consider the interplay between individuals' proactive use of linguistic features to make social meanings and the longstanding associations between linguistic usages and social groups [...], iconic characters [...], and interactional stances [...] from which interpretable social meanings are necessarily drawn.

A closer examination of individual Guam English speakers and their position in the community will add to a more holistic understanding of language variation and change in Guam.

4.2.9 Recruiting Participants

Participants for the study were found relatively quickly and with ease. This may, in part, be due to language being a main subject of on-going debates in Guam. The responsible committees have put a lot of effort into the promotion of the indigenous language alongside English, which has sensitized the inhabitants to a language debates (c.f. Dibision Inestudion Chamoru, 2018). They are well-aware of the loss of the indigenous language and English becoming (or having become) the main language spoken on the island. It was therefore not surprising that people hearing about a language research project were eager to participate and to share their opinion on the matter.

Local gatekeepers and informants were mainly found through personal contacts, for instance at the various mayor's offices and through public and social media outreaches, such as newspaper articles and TV programs reporting on the project, as well as Facebook posts and shares (Borja, 2017; Babauta C. , 2017; Santos Steffy, 2017; Eugenio, 2017).

Participants were also found at the local educational and cultural centers, such as the University of Guam, Chamorro/English language immersion schools, the public library and museums. Finally, with the expansion of a personal social network on the island, I was able to recruit a lot of speakers through the friend-of-a-friend method. The various ways of contacting participants will be explained further in the following section.

1) Finding participants at government institutions

I stopped by the many mayor's offices around the island to introduce myself and the project to the community in great detail. In many cases, the mayors took the time for a personal conversation and occasionally volunteered to be part of the project. They were then able to direct me to the rest of the staff or people in the community that would be willing and suitable to participate in the study.

Many of the older informants were approached at the *Manâmkô* 'centers', which are senior citizen centers located in proximity to the mayor's offices in most villages on the island. They are a place for the elderly to chat and play Bingo. There, I was quickly introduced to potential participants. After approaching the supervisors first and introducing myself to them, I was directed to those people that would fit the participant profile and were known to enjoy a chat.

2) Finding participants through public and social media

A successful way of contacting a larger number of participants was through public and social media. Several articles on the project were published in a local newspaper, both in print and online. In the articles, a call for participants was included, allowing the readers to contact me if they wanted to participate. The newspaper articles were shared eagerly on social media. One article on my project had 316 shares, 138 comments and 625 likes on Facebook²⁵ (Eugenio, 2017). In addition, people wrote separate social media posts about the project, reaching even more potential informants. As a result, a large number of participants were recruited quickly and as they had read a little bit about the project already, they seemed comfortable to be interviewed and recorded.

The downside of approaching a large mass of people at once is that stratification methods are somewhat out of the control of the researcher. What type of potential participants would get in touch with me after reading about the project in the media was, to some extent, unforeseeable. Although the people contacting me varied in age and various other social factors, they tended to be below the age of 65 and of higher education. Consequently, I conducted more active searches, for example through government institutions, to find informants that could not be reached via public or social media.

Finding participants through public and social media outreaches further entailed that people were aware of my research focus on language and that their own speech would be a main interest during the interview. In addition to the observer's paradox, which will be described in *section 4.2.10.4 - Criticism of the Sociolinguistic Interview*, this may have added to an environment that caused the participants to switch to a more standard speech style.

3) Friend-of-a-friend method

The friend-of-a-friend method, also sometimes referred to as 'snowball sampling' (Goodman, 1961), was famously employed by Milroy and Milroy in their 1970s studies in Belfast and is discussed thoroughly in Milroy and Gordon (2003). It is an easy way to find participants through people that one has already encountered either in a personal social

²⁵ As of April, 2019

context or as study participants. I often asked participants if they had an acquaintance who might be interested in participating in the project as well. In most cases, they eagerly referred me to other potential participants, who I then mainly contacted through email, Facebook or WhatsApp. I noted that the people I was referred to through a common friend instantly felt at ease and ready to talk to me, as a certain level of trust was already established through the mutual social connection.

Personal anecdote: At one point, a relative of a study participant approached me, asking if she could also participate in the study, promising that even though she had spent most of her life on the U.S. mainland, she was perfectly capable of enacting a local dialect. I politely said that I would love to have a conversation with her, but that the performance of a local accent was not the purpose of the research project. Overhearing this conversation, the study participant firmly dismissed her relative's intentions by saying something along the lines of: "No! Leave her alone! You don't qualify for the study! She's only looking for people like me!" It then occurred to me that participating in the study was not only a big favor that people were granting me, but that some considered it a privilege to be able to tell their story and to recount Guam's history and cultural essence from their point of view.

Similarly to the method of reaching potential participants through the media, the friend-of-a-friend method can also entail a "silo effect" (Eckert, 1989; Eckert, 2000, p. 77), i.e. leading to a large number of participants who share a similar social background. For that reason, new threads of contacts were continuously and successfully established throughout the fieldwork period by regularly approaching strangers in public places, asking them if they would be interested in participating in the study.

4.2.10 The Sociolinguistic Interview

For most of the data collection, I relied on the sociolinguistic interview as a well-established method to elicit (close-to) natural speech for language research. It has been employed since the 1960s, when it was first described as a method by Labov (1966) in his study of New York City's Lower East Side. It has been praised for being a more subtle language elicitation technique compared to survey questionnaires that are usually much more directly focused on language

(Schilling, 2013). The idea is to steer the interviewee's attention mostly away from their speech by discussing everyday topics and with that, one expects to create a much more relaxed study environment that allows for more "casual", "natural"²⁶ speech patterns. There are many strategies to elicit "natural speech" in a sociolinguistic interview. Many are concerned with making the participant feel comfortable during the conversation, which is a main objective, starting with the way a potential informant is initially approached.

4.2.10.1 The Introductory Statement

Schilling (2013, p. 179) stresses the importance of an individually-crafted introduction when approaching potential participants or institutions on fieldwork. I decided to introduce myself in a relatively consistent way, both in a written introduction (through email contact with various institutions or Facebook and WhatsApp messages to potential informants) and when personally approaching people. It is debatable how much information a researcher should reveal about the project to potential participants. On the one hand, it is certainly ethically preferred to give the participant a clear idea about who you are as a researcher and what exactly you are looking for in an interview with them. On the other hand, as one wants to keep the interviewee's awareness of their own language patterns at a minimum, it is beneficial to not mention in too much detail what the researcher is interested in analyzing. A rather unrevealing and brief introductory statement, for example, was employed by Shuy, Wolfram and Riley (1968, p. 20), who merely stated the following: "We are interested in how different people talk in this area." I made the conscious choice of informing participants that this is a research project about the English dialect spoken in Guam. I did not, however, go into any detail about what aspects of the language I was especially interested in. This, in part, also had to do with the very open framework of the study. Especially the initial interviews were exploratory and the central language features of interest, or even whether they would be of grammatical, phonetic, or lexical nature had not been decided on. In many cases, an introduction was drafted sounding somewhat like these two excerpts from WhatsApp messages sent to friends of friends and potential study participants.

²⁶ The idea that a sociolinguistic interview is an optimal method to elicit casual speech style relies on the acceptance of Labov's attention to speech model. The ambiguity of the terms "casual" and "natural" in the context of a sociolinguistic interview is discussed at a later point (see 4.2.10.4 - *Criticism of the Sociolinguistic Interview*).

- A) Fieldworker: “Hi [name of participant], this is Eva. I’m the one doing research on English in Guam. It would be great if I could meet with you to do a recording. I’m quite flexible and can probably work around your schedule.”
Participant: “Okay awesome! How long will it take again?”
Fieldworker: “Around 45 min and it’s just a casual chat, so we can have coffee or cookies and it won’t be hard at all ☺”
Participant: “Awesome, we can do Tuesday around 5.30 pm?”
- B) Fieldworker: “Hi, how are you? I’m Eva, I talked to your boyfriend last week about my PhD project on English in Guam...he said you’d be a great person to talk to because you are a born and raised local. I’m interested in the English accent of the locals. Would you mind coming into work with your bf, maybe this Thursday so I could chat with you?”
Participant: “Hi Eva! Sure I could totally chat with you tomorrow. I’ll be at [location], but we can move next door to the coffee shop to chat. See you tomorrow ☺”

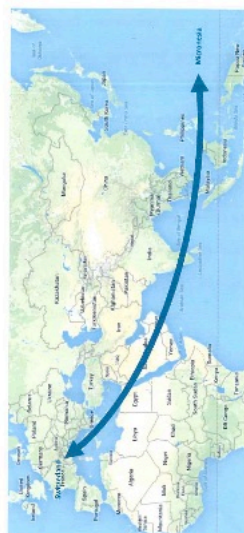
In addition to a personal introduction of myself as a researcher and a broad overview of the project, some participants, especially those approached in public places with no mutual social connection, were handed a flyer of the project. The flyer was created by a larger research group studying English in Micronesia²⁷ and contained information about Switzerland, the University of Bern, as well as our motivations for the research in Micronesia (fig. 19).

²⁷ “English in Paradise?: Emergent varieties in Micronesia”; Project contributors: Britain, D.; Matsumoto, K.; Hess, D.; Kuske, E.; Leonhardt, T.; Lynch, S.; Mettler, L. Funded by the Swiss National Science Foundation

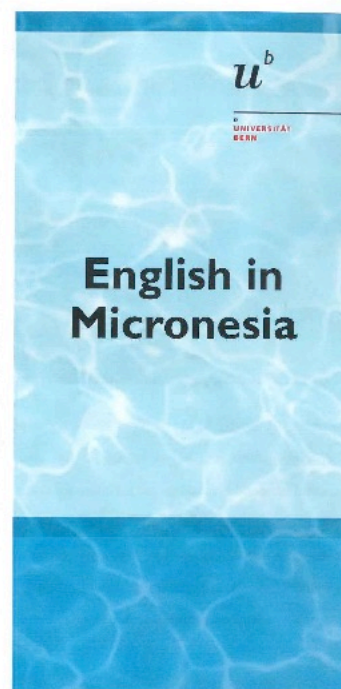


- Kiribati: tobias.leonhardt@ens.unibe.ch
- Saipan: dominique.buerki@ens.unibe.ch
- Kosrae: sara.lynn@ens.unibe.ch
- Guam: eva.kusko@students.unibe.ch
- Nauru: lara.mettler@students.unibe.ch

The recordings will be stored securely and used for legitimate linguistic research only. All the names of the people we record will be anonymised.



SNSF
SWISS NATIONAL SCIENCE FOUNDATION



Where are we from?



Switzerland is located in the center of Western Europe with a population of about 8 million. It has many beautiful lakes and mountains, and is famous for skiing, tasty chocolate and cheese. Bern is the capital of Switzerland and hosts an old medieval church, a beautiful view of the mountains and a river surrounding the city that people swim in during the summer.

We have come to Micronesia from the English Department of Bern University. Our aim is to explore the variety of English as spoken in Micronesia. We will be focusing at first on the islands of Guam, Kiribati, Kosrae, Nauru and Saipan.

We hope to make this possible by recording conversations with local people, so that we can look at the distinctive ways English is spoken across Micronesia and compare it with other varieties of English spoken in the Pacific and beyond.



Global Englishes

English in Micronesia has not been described before and we think it is important to at last put Micronesia on the Global English map!



If you think you could help us in our project, please send us an email. Our addresses are on the back.

THANK YOU !!!

Figure 19 - Informative flyer, handed out to potential participants as part of the introductory statement about the project.

Although the participants were always informed that this research was about the English spoken in Guam, many misunderstood the purpose of the study and thought that I was mainly interested in the indigenous language and culture. They then referred me to fluent Chamorro speakers which nowadays are rarer to find in Guam. I was often mistakenly directed to interview people from Rota, a nearby island where the indigenous language is still more actively spoken. This is an indication that the participants were not solely focused on the language aspect of the study and were more so concerned with giving me accurate information about the culture in the Pacific. Consequently, they may have been less aware of their own speech during the interview than initially expected.

4.2.10.2 The Interview Settings

For the sociolinguistic interviews in my study, I usually met with the participants in a public place, most often a café or an office space, for instance at the library, the university or a mayor's office. The main objective was for the participants to feel comfortable in the locality while ensuring good sound quality for the recording. In order to elicit natural, relaxed speech, diverging from a stiff interview setting was a necessity. This involved tearing down some of the power structures that are generally associated with the conventional interview-style. I shared personal stories and information with my participants (where I deemed it appropriate and necessary) and generally saw myself as an active participant in the conversation, which helped to diffuse the question and answer game commonly associated with an interview. Moving the interview setting from a sterile recording room to spaces where participants actually find themselves on a regular basis can help improve the atmosphere of an interview. Britain (2016) discusses collecting language samples from people on the move, perhaps while grocery shopping or in a car journey as done by Mendoza-Denton (2008). This way, we might collect more natural speech as we focus on interacting with the participants in an environment that they are used to. Hay, Podlubny, Drager and McAuliffe (2017) found that phonetic variation in speakers can actually be triggered by car noise. As the car is the main mode of transport in Guam, I spent much time chatting with locals while on the move and frequently observed their language in the process. However, I did not record sociolinguistic interviews during the process. One participant, who was referred to me by a mutual but distant connection, made it clear that he would prefer the interview to be in a mobile setting. As with all of the participants that I did not know personally, I had set up a public meeting point, in this case at a quiet local café. As the participant entered the café, he quickly confessed that he did not feel

entirely comfortable in the setting and that he would rather drive around the island in his truck while doing the interview. I had the possibility to meet the participant's wishes and move to a location which was more comfortable for him. However, as a female researcher working in an initially relatively unfamiliar place, I decided to follow a set of principles to ensure personal safety, which meant that I insisted on remaining in a public place, knowing that this may, to some extent, jeopardize natural speech elicitation.

Some of the interviews were conducted in the participants' homes, where they occasionally moved around freely, preparing food or looking after their kin. Some were also conducted during a quiet phase at the participants' work place, where they were still able to follow small work-related tasks while engaging in a conversation with me.

I also often conducted sociolinguistic group interviews, talking with two participants rather than one at the same time, a method that has been employed and praised frequently by sociolinguists for making the interview setting more comfortable and natural (cf. Matsumoto, 2013). It turned the focus away from my role as the interviewer, which often resulted in the participants chatting amongst each other. It was not uncommon that participants started asking each other questions, such as in this chat between two co-workers and friends who enjoyed the interview as a way of finding out more about each other's past experiences, for example attending university on the U.S. mainland:

Gu82f53: You lived in the States for a while?

Gu81f50: No, I'm just, you know, I watch a lot of movies [laughs].

Gu82f53: I lived in the States for like six years before coming back, yea.

[...]

Gu81f50: How did you feel there?

Gu82f53: I was fine [laughs], I had fun. I had a great time. I mean, I think I- I appreciate the mainland for what it was, you know, uhm, I was able to, you know-

Gu81f50: So you went to University of []? See, I'm only finding this out too! So who were your classmates? Like how many, you know-

Gu82f53: Oh, they were all white.

(Female Filipina, Gu81f50, born around 1967 and female Filipina, Gu82f53, born around 1964)

This relaxed interview setting is an indication that group-style interviews are a good option to diverge from a rather sterile interview setting and it is a chance for the researcher to take on a less central role.

The interviewer-free method of conducting recordings by handing the device to the participants and leaving the room has been reported as a successful method to create a less formal question-and-answer type of setting and to make the participants feel more comfortable (Schilling, 2013). I tested this method a few times during fieldwork, but the collected interviews had to be excluded from the dataset, as they had resulted in the participants being overly aware of the recording device rather than more comfortable in speaking without an interviewer present. In the few instances where this method was tried out, the participants grabbed the recording device and started jokingly leaving messages for me, the interviewer, singing songs, or they started playing a card game without actually engaging in a conversation. Some accidentally changed the recording settings which resulted in insufficient audio quality.

4.2.10.3 Structure of the Interview

The interviews did not follow a pre-set script. On the contrary, the goal was to have a natural conversation about whatever topics the participants felt most comfortable with. In some ways, this was in accordance with Labov's (2001) proposed *Decision Tree*, a model that categorizes eight different contexts that are likely to occur in a sociolinguistic interview as *careful* or *casual* speech. To name only a few examples, casual speech in a sociolinguistic interview can be found in personal narratives or in group settings where speech is addressed to a third person; someone other than the interviewer. Contexts that are more likely to elicit careful speech are, for example, the very initial response that a participant gives to an interviewer's question, or discussing the topic of language. While the structure of the interview was generally kept open, contexts that would potentially favor casual speech, according to Labov's model, were generally favored.

In most of the recordings, the participants were initially reminded that this would be an informal chat, that they did not have to worry about what they said on the recording, that they could even curse or gossip about other people, as it would only be used for research at the university and their names would be kept anonymous. This initial information was also a way to inform the participants about the purpose of the interview and to ask for their consent. The information about the study and the participants oral consent were saved on the recording. For

study participants below the age of eighteen, the consent of the caregiver was required in addition to the consent of the participant. No written consent was required. The following is an example of an interview beginning:

Fieldworker: So the point of this is just that we're gonna have a conversation for 45 minutes, uh, about anything, but uhm, gonna ask you some questions that are just interesting to me, for my study. And the recording is just gonna be used for research at the University of Bern and your name is not gonna be published anywhere.

Gu86m19: Oh, darn.

Fieldworker: Is that okay?

Gu86m19: That's alright.

(Male Filipino, Gu68m19, born around 1998)

The participant jokingly responding “oh, darn” to the reminder that his name is going to be kept anonymous is an indication that he did not feel threatened by being recorded for research. This was expected to be the case for all participants.

To ease into the interview, I usually initiated a conversation, asking about whether or how the participants had heard of the project. Furthermore, after having been on the island for a while, I had enough connections to often find a mutual friend that I could talk about with the participants. This may have helped to make them feel more at ease and to allow them to see me more as a conversation partner than a researcher.

A large part of the conversation content revolved around the participant's life stories. A short open question, such as “what was it like to grow up in Guam/so close to the military base/as a bi-racial person in Guam?” often triggered long narratives. Within those narratives, I elicited necessary information about the speaker's social background which were later noted in an Excel spreadsheet. Information of interest was the speaker's occupation, level and type of education, age, mobility patterns, religion, social network, language skills and attitudes toward Chamorro and English and a personal evaluation of their own ethnicity in the context of Guam. As most of the participants were quite talkative, eliciting basic social information was always done in connection with extensive stories that quickly filled an hour long interview. If some of the above mentioned topics did not come up, I used the last few minutes of the interview as a way of wrapping up the conversation and making sure that I had an idea of the speaker's social profile to the extent that

they were willing to share with me. This was then usually done with short and straight-forward questions for which the answers.

A modified version of the famous danger of death question, first introduced by Labov (1972b, p. 113) was quite regularly included in the interview, as a way of eliciting passionate speech, diverging the speaker's attention away from the topic of language. The question was adapted, depending on the interviewee. In a few interviews, the individuals had been part of a gang in their childhood and fights had been common. In those cases, the danger of death question was asked in a similar fashion to Wolfram's (1971) approach (cited in Wolfram and Fasold, 1974, p.54), focusing on the violence and danger involved in street fights: "What kinds of things do fights usually start about on the street? [...] Ever see anybody get beat up real bad? [...] How about a situation where you thought, 'Man, this is it, I'm gonna die for sure now'?" In other cases, where the topic of street fights did not appear relatable to the participants, the danger of death question was modified following what Wolfram, Schilling-Estes and Hazen (1999) term the *Ocracoke Module*: the topic was adapted to the dangers of living on an island, which entails precarious weather situations. Storms and major typhoons are common on Guam and were an option to elicit passionate narratives about dangerous life events. The following excerpt presents a narrative that was elicited during a sociolinguistic interview with a study participant, revolving around a childhood memory during a precarious super-typhoon:

It was a concrete house, it's still there. Concrete house with a tin roof- it never got repaired, so the concrete is still there, but it's still roofless and so we sat there in my parents' bedroom and you could just hear the tin being ripped away at and ripped away at until it finally went [...] We- I guess maybe the roof was- uh- attached in a couple different areas, so the section over my parents' bedroom and my sister's bedroom were still there but for the rest of the house, it was gone, like, my bedroom was gone, like, all my clothes were sucked out and gone- yea- that was- it sounded like uh the [] was out there with a saw, just like-. (female Caucasian, Gu88f53, born around 1964)

Following Labov's Decision Tree, I initially tried to avoid the topic of language until the second half of the conversation, as I wanted to keep the participants' attention to their own speech patterns to a minimum and encourage casual rather than careful speech. However, I soon realized that the conversations about the language situation in Guam were often the liveliest ones. The locals have strong opinions about the decline of their native tongue and could not wait to tell me about it. It

would have felt forced and unnatural to diverge from the topic each time it came up, solely to postpone it to the end of the conversation. If the topic came up, we briefly discussed it, and I was able to gain valuable insight into the speakers' attitudes toward the two official languages in Guam. The topic of language occasionally triggered "soapbox" style speech, a term included in Labov's Decision Tree to signify the type of speech during an interview that is technically geared toward the general public, voicing strong, perhaps political opinions that address a larger, non-present audience (2001, p. 91). This may be, again, due to the fact that language is often a topic of political debate in Guam, which triggered the participant to occasionally fall into that speech style.

4.2.10.4 Criticism of the Sociolinguistic Interview

There is potential for criticism of the sociolinguistic interview as a way of collecting authentic speech samples. Some researchers criticize this open interview style as being less natural than other, more formal types of interviews. They argue that, because of people's association with the term "interview", the participants expect a formal question and answer game and assume that the content of their answers makes up a crucial part of the research project. When they get the impression that the interviewer is not actually interested in the content of their stories, or when they realize that there is no fixed set of questions to go through, they might get frustrated (Wolfson, 1976). A counter argument comes from Eckert (2000), who argues that, though the sociolinguistic interview may in fact be "unnatural", it is really not clear what type of speech act could be considered natural or casual. All speakers have a repertoire of speech styles to switch into, depending on what the situation may call for and many speakers "shift along a continuum of formality" (Becker, 2013, p. 93). Which of those speech styles can be considered "natural" is debatable.

It is nevertheless clear that the elicited speech style (or speech styles) was adapted to me, a white, non-local and non-native English speaker. Many participants noted at some point during our conversations that I did not sound "like a typical haoie," meaning that I did not have the Caucasian, mainland American accent they were familiar with. The participants likely shifted to a less vernacular style, which could be criticized as "inauthentic speech". The effect of the interviewer is often discussed as a critical issue in linguistic research. Labov coined the term "Observer's Paradox," formulating it as follows: "To obtain the data most important for linguistic theory, we have to observe how people speak when they are not being observed" (Labov,

1972b, p. 113). It is inevitable to have an effect on the speaker, even if, as linguists, we would like to see ourselves in the position of mere observers of language. Keeping the effect of the interviewer and the slightly unnatural context of the sociolinguistic interview in mind and discussing it as part of the analysis is far more beneficial for the research than to try (and fail) to avoid it at all costs. In most of my interviews I was under the impression that despite the slightly unnatural setting, participants were able to speak openly about the subjects of their choosing. One of my study participants, for instance, was so aware of the sociolinguistic interview being a recorded and therefore not private, natural conversation, that he needed to double-check with me first, before he felt comfortable to “speak freely”. Before discussing the topic of race and what it was like to grow up as part of a racial minority on the island, he asked:

Gu73m68: “PTSF? Permission To Speak Freely?”

Fieldworker: “Of course!”

Gu73m68: “Is it okay if I tell you what’s really the real deal?”

(Male Caucasian, Gu73m68, born around 1949)

What followed was a heart-felt, emotional and very personal description of the participant’s childhood memories. It shows that the sterile, perhaps unnatural setting of the sociolinguistic interview created an initial barrier, but eventually did not hinder personal storytelling.

I expect that the elicited speech in my sociolinguistic interviews is at least one of a common repertoire of speech styles of the informants. Though they likely did not employ the most informal, in-group speech in conversation with me, it was nevertheless a speech style that they would commonly use in conversations with respected strangers. In the frequently employed interview constellations where two locals were present, conversing amongst each other, I expect the speech styles to be slightly more informal. I therefore argue that the collected Guam English corpus is representative of a natural speech style, though it may be on the more formal side.

Finally, a major setback of the sociolinguistic interview is the fact that the researcher cannot predict or control the sort of language dataset that they will end up with. Unlike with pre-defined reading passages, the content of sociolinguistic interviews is kept open. As a result, the research question may need to be adapted. It might be difficult to gain information about the use of certain lexical or grammatical forms, as they simply may not come up in the interview. However, for the quantitative

research focus of the present study, the sociolinguistic interview proved to be an ideal form, as the short front vowel production did not have to rely on a preset spoken text but could be based on any (close to) natural speech corpus.

Many sociolinguistic interviews also include a section that is geared towards eliciting more careful speech by giving the participants reading tasks, word list tasks or minimal pair tasks. Careful style in the sense of a more formal repertoire was likely elicited throughout the sociolinguistic interview due to the reasons discussed above, but neither of the latter three tasks was employed during fieldwork. This was mainly because the interview was already expected to last a minimum of 45 minutes, and I did not want to take more of the participants' valuable time. Since the main focus of this study was to get a general first idea of the overall linguistic profile of Guam English, eliciting unscripted speech was prioritized. Future research could include both methods and perhaps compare the two.

4.2.11 Ethnographic Participant Observation Methods

In addition to linguistic research in the form of interviews, the fieldwork also consisted of ethnographic work by means of careful observation of community life in Guam. Ethnographic fieldwork methods are an important aspect of linguistic research because language is necessarily embedded in a social context. Or, as Labov (1963, p. 275) puts it: "One cannot understand language change apart from the social life and the community in which it occurs." The role of the ethnographer, then, is to observe the community as an outsider, while at the same time being an active member of the "goings-on of a community" (Levon, 2013, p. 204). The ethnographer needs to carefully find the balance between being both an insider and an outside observer.

As part of my ethnographic fieldwork, I studied the islanders' cultural practices at social gatherings with a particular interest in the celebration of what is considered "indigenous" alongside the more "modern" Americanized cultural practices. This included careful attention to non-verbal communication, such as in the form of dancing or greeting customs, as well as social interaction and speech patterns outside of the linguistic interview. Observations were noted down in a "fieldwork diary," which I frequently referred back to after the data collection period had come to an end. The findings of cultural and community patterns in a linguistic context will be discussed as part of the description of Guam English (see *Results, Part I*). Any ethnographic interpretations

of Guam's community life presented in the results section are purely subjective, which is, as stated in Blommaert (2007), a foundational principle of ethnography.

4.2.12 Historical Data Collection

Apart from linguistic data collection, historical data was attained at local libraries, archives and sometimes from personal collections of study participants. The Micronesia Area Research Center, for example, is one of the largest research centers to hold historical and contemporary documents, which are mainly, but not exclusively focused on the Pacific region. The results from archival research and data collection there allowed me to expand my knowledge on the social and linguistic history of Guam, which further contributed to answering the first research question, *How did English emerge in Guam, socially, historically and linguistically?*

4.2.13 Record Keeping and Data Management

To ensure high quality of the recorded data and to prevent loss of valuable information, strict guidelines were followed for record keeping and data management. The interviews were recorded on a Zoom H5 recorder with recording quality standards set in accordance with the general practice in sociolinguistics according to De Decker and Nycz (2013) and Schilling (2013): Uncompressed recording format, WAV file type, sampling frequency=44.1/48 kHz, bit rate= 16/24 (Mono/Stereo) in the multitrack mode. AKG lavalier microphones were attached to the participants in addition to the main microphone capsule; all of which had additional wind screens installed to improve sound quality. The recorder was not hidden away but was for the most part ignored by the interviewer and most often also by the participants. It did not usually come up in conversations, but if it did, the recording device was explained to the participants.

The recordings were then stored on external hard drives as well as on a secure server at the University of Bern, where they were regularly backed up by the project data manager. The participants were given a speaker code consisting of the research location (Guam=Gu), the recording number, the speaker's sex and age. The code *Gu3m43*, for instance, reflects the third recording made in Guam, of a male, 43 year old speaker. For the analysis, only the speaker codes and not the names were used to protect the speakers' identity.

4.2.14 Giving back to the community

Many researchers stress the importance of giving back to the community one has studied and interacted with (Schilling 2003, Nagy, 2000). This can come in many forms. It can be as simple as lending a sympathetic ear to the person you are conducting the interview with (Labov, 1984) or giving your business to community members rather than larger cooperations (i.e. shopping locally). I employed both of these rather easy and joyful ways of giving back in some form during my fieldwork in Guam. The sociolinguistic interviews with study participants were enjoyable and many participants expressed how much they appreciated being able to share stories about their childhood on the island and that they are thankful to see outsiders interested in their culture. I cooked many dinners with locally sourced food through a farm-to-table organization, hosting guests from the community to show gratitude and to discuss non-research related matters.

Furthermore, giving back to the community can be achieved by contributing to the spread of knowledge and awareness about the local language situation. I was able to communicate preliminary findings of my research through lectures held at the local University (Kuske, 2017; 2017) and a public presentation that was televised (Micronesia Publishing, 2018). I was able to spark a conversation about dialect discrimination and the celebration of local color and pride in Guam English. Newspaper articles on the subject were widely read and shared on social media (Borja, 2017; Babauta C. , 2017; Santos Steffy, 2017; Eugenio, 2017). Some of those topics were then revisited by well-known public figures on the island, such as by the former president of the University of Guam, Robert Underwood in his newspaper column, where he addressed the value of the English dialect of Chamorro elders after having attended my public lecture (Underwood, 2017). Furthermore, as this research was funded by the Swiss National Science Foundation, it is subject to the requirement to make the research results available in an open access publication or database (Swiss National Science Foundation, n.d.).

4.3 Data Processing

After the fieldwork and data collection phase on the island, the data was processed and analyzed in part at the University of Bern as well as at North Carolina State University. The same data collection and initial data processing methods were employed for both the qualitative and quantitative analysis. The recordings were first checked for sound quality and it was established

whether the participant fit the final criteria for the study. This mainly depended on whether a participant self-identified as one of the three ethnic groups in focus and whether they had spent their formative years on Guam. Speakers that did not meet the study criteria were excluded from linguistic analysis, but the content of their interviews still served as valuable information on the island's socio-cultural background.

4.3.1 Transcription

The transcription of the recordings was done using ELAN, a well-established software to transcribe data for linguistic purposes (ELAN (Version 5.0) [Computer Software], 2017). A total of 62 recordings were transcribed. In order to ensure optimal comparability of the recordings, similar data processing had to be employed from the start. That included strict transcription guidelines which were based on those set up by a larger research group studying English in Micronesia at the University of Bern and additional guidelines to facilitate FAVE analysis (for the latter, c.f. *section 4.3.3.1.3 - The Benefits and Limitations of FAVE*). Consequently, the transcriptions followed the VSLX form, commonly employed in variationist sociolinguistics, meaning that the transcriptions reflected the speech word for word, but included less detailed information about certain aspects of conversation, such as length of pauses or a phonetic transcription (Meyerhoff, Schlee and MacKenzie, 2015). Apart from individual speaker tiers, the transcription included a separate tier for background noise, one for performative speech segments²⁸ or speech segments in a language other than English, as well as a tier for the transcriber's comments. The transcriber's comments could include anything that they wished to keep on record, from short notes that may later be significant for the analysis to brief informative comments between the transcribers, who were student assistants employed at the University of Bern, and the main researcher. Punctuation was generally not employed, as spoken language flow was assumed not to follow the general punctuation rules. The words were usually spelled orthographically. On occasion, *allegro* speech forms (Preston, 1985) were used, such as in the words *because* (spelled: 'cause) or *going to* (spelled: *gonna*) (see appendix for the complete form of transcription guidelines). As the data was going to be analyzed using FAVE (c.f. *section 4.3.3.1 - FAVE*), it was

²⁸ Speech segments were labelled as "performative" when the speaker imitated someone else's speech in a performative way.

important to have the transcripts done in a way that facilitates automated vowel alignment. This meant that the annotations had to be rather short (as suggested in (Bailey, 2016)) and that overlapping speech, or sections of the conversation with loud background noise were only transcribed if the recording was expected to be used for further analysis later on and not just for the automated vowel analysis. Indecipherable speech was marked in square brackets and was later excluded from the analysis.

Often, transcription is suggested to start fifteen minutes after the beginning of the interview (cf. Drager, 2013). This is mainly based on the reasoning that people may be feeling uncomfortable in the first few minutes and therefore show less natural speech compared to the remainder of the interview, which ought to be the focus of linguistic analysis. However, since the participants were only asked to sit down with me for a 45-minute conversation, I wanted to use the entire interview so as to not lose valuable data points. Additionally, following the theory of the Observer's Paradox, it is likely that the participants were using a more standard variety of their dialect throughout the whole interview and not just in the first fifteen minutes.

4.3.2 Overview Description of Guam English

Auditory analysis was the main method employed for the overview description of Guam English and was conducted during several phases of the research project. First, during fieldwork, where notes of salient features of Guam English were noted in an unstructured way. Secondly, during the transcription phase, where comments on those features were noted that appeared frequently and were subjectively salient to the transcriber due to their deviance from a more standard English. Those comments were noted in a separate tier on the transcription file. Furthermore, during several meetings with trained linguists, recordings of representative speakers were played and again, salient and frequently occurring features were collected.

In a next phase, auditory analysis of the recordings of representative speakers followed structured guidelines: several linguistic categories were analyzed with a changing focus on phonetic and phonological, prosodic, morpho-syntactical and lexical features. Concerning the phonological features, vowels were compared to Wells's (1982) description of the American English vowel system in the form of a lexical set, listed in Table 9. Less frequently occurring vowels (e.g. CURE) were specifically searched for in ELAN, with example words in part following a list based on Honorof (2003), (York University, n.d.). The consonants were described in their

respective categories (stops, fricatives, affricates, nasals, lateral, retroflex liquid, glides). The analysis of prosodic features was limited to the most salient productions, focusing on the most relevant differences between older, L1 Chamorro speakers and the younger, L1 English speakers. Morpho-syntactic features were analyzed based on the extensive list of relevant categories proposed by the Electronic World Atlas of Varieties of English (eWAVE) (Kortmann and Lukenheimer, 2013), which includes the use of pronouns, noun phrases, tense and aspect, modal verbs, verb morphology, negation, agreement, relativization, complementation, adverbial subordination, adverbs and prepositions, as well as discourse and word order. Only those morpho-syntactic categories provided by eWAVE were analyzed that appeared to deviate from a standard English production. To comment on the use of lexis, a list of frequently used terms in the categories of family relations, food and edibles, town, village and street names, common forms of greeting, culturally relevant terminology, terms deriving from languages other than the indigenous, as well as English terms used differently from American English was created and expanded during the entire process of data analysis. For those words that derived from a language other than English, their etymology was researched and commented on. Comments on the most noteworthy non-verbal communication patterns make up an additional part of the overview description of Guam English and were attained during ethnographic observations on fieldwork and not during the analysis process of the recordings.

For the overview description of Guam English, the main objective was to provide a broad descriptive spectrum of linguistic features found in Guam English. The intention was not to provide an in-depth analysis, such as the one found in the quantitative analysis of the short front vowels, but rather to give the reader a general grasp of the variety's profile that may perhaps be regarded as a point of departure for future research. The analysis relies on ethnographic work done during a limited fieldwork period and on a limited amount of sociolinguistic interviews. Any statements and observations therefore are not made claiming to describe the entire island community, but rather to give insight into possible characteristics of the collected database.

4.3.3 Quantitative Analysis of the Short Front Vowels

A quantitative acoustic analysis allows for a closer look at a set of linguistic features in Guam English. The short front vowels KIT, DRESS and TRAP and their reference vowels FLEECE and FACE were chosen as a focal point of this analysis, as their development in apparent time can

provide insight into the direction of linguistic change in the variety. Comparison of the Guam English short front vowels to those of standard and regional American Englishes, for which regional vowel production is extensively documented (e.g. Eckert, 2000; Drager, 2013; Labov, Ash and Boberg, 2006), can confirm or reject the hypothesis that Guam English is assimilating toward an American norm. Furthermore, the short front vowels occur frequently in speech, which ensures a large selection of data points for every speaker. The focus of this analysis was kept on a corpus of 40 Chamorro speakers that met the data quality requirements necessary for the method of choice, which was an automated analysis. Only the ethnic group with the most speech samples could be considered here, in order to ensure reliable statistical analysis.

4.3.3.1 FAVE

For the quantitative analysis of the three short front vowels and the two reference vowels, automated vowel measurement was employed, using the online version of University of Pennsylvania's Forced Alignment and an offline version of the Vowel Extraction suite (FAVE) (Rosenfelder, Fruehwald, Evanini and Yuan, 2011). The automated vowel measurement process involves two essential steps, executed by two separate programs: FAVE Align and FAVE Extract, which will be explained in more detail in the following sections, including an evaluation of the benefits and shortcomings of this method.

4.3.3.1.1 FAVE Align

FAVE Align produces a phonemic transcription of the orthographic, word-level transcription (provided by the researcher), which it then time-aligns with the corresponding audio file through an automated process, utilizing pronouncing dictionaries and appropriate acoustic models that are based on the Penn Phonetics Lab Forced Aligner [p2fa] (cf. Yuan and Liberman, 2008; Bailey, 2016; Yuan, et al., 2013). It outputs a Praat TextGrid that includes both a tier with the word-level transcription, as well as a phonetic transcription including stress-marking for vowels (0= no stress, 1= primary stress, 2=secondary stress). The phonetic transcription is done in ARPAbet, an alphabet used to transcribe American English phonetic sounds. This alphabet is listed in table 7, along with the corresponding terminology using Wells's lexical set and phonetic symbols. It will not, however, be used to refer to the vowels in the results section, as representation with lexical sets and phonetic symbols is more common. Note that ARPAbet does not have an equivalent of all

vowels represented in the lexical set. SQUARE and NEAR, for example, are non-existent in ARPAbet and therefore also don't get allocated to those vowels in FAVE Align. This will somewhat affect the interpretation of the results of this study in regard to the linguistic constraints on the vowel. NEAR vowels are allocated to FLEECE in a pre-r environment, but in the vowel plots one can see that they should in fact be in a different vowel category, as they form a lower and backer outlier group in many of the speakers' vowel plots.

A diagrammatic representation of the alignment process is shown in fig. 20 of the example word "base" as presented by Bailey (2016). An example of the FAVE Align output when applied on Guam English data is shown in fig. 21, using the example phrase "he knows the language."

LEXICAL SET	ARPAbet	Phonetic symbol
KIT	IH	[ɪ]
DRESS	EH	[ɛ]
TRAP	AE	[æ] or [a]
LOT	AA	[ɑ]
STRUT	AH	[ʌ]
FOOT	UH	[ʊ]
NURSE	ER	[ɜ]
FLEECE	IY	[i]
FACE	EY	[e]
THOUGHT	AO	[ɔ]
GOAT	OW	[o]
GOOSE	UW	[u]
PRICE	AY	[aɪ]
CHOICE	OY	[ɔɪ]
MOUTH	AW	[aʊ] or [aw]
commA	AX	[ə]

Table 7 - Vowel terminology in Wells's (1982) lexical set, ARPAbet (Advanced Research Projects Agency, n.d.) and IPA. The table is loosely based on (Rice, 1976).

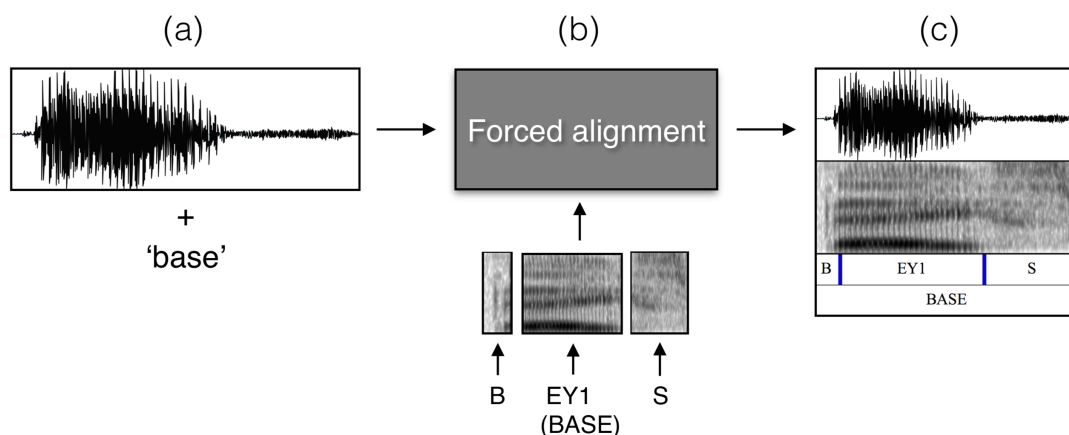


Figure 20 - Diagrammatic representation of the Forced alignment process according to Bailey (2016, p. 12), showing “(a) the input of the audio along with an orthographic transcription, (b) the forced alignment process itself, using a pronouncing dictionary and the appropriate acoustic models, and (c) the output of a time-aligned TextGrid with phone- and word-level tiers.”

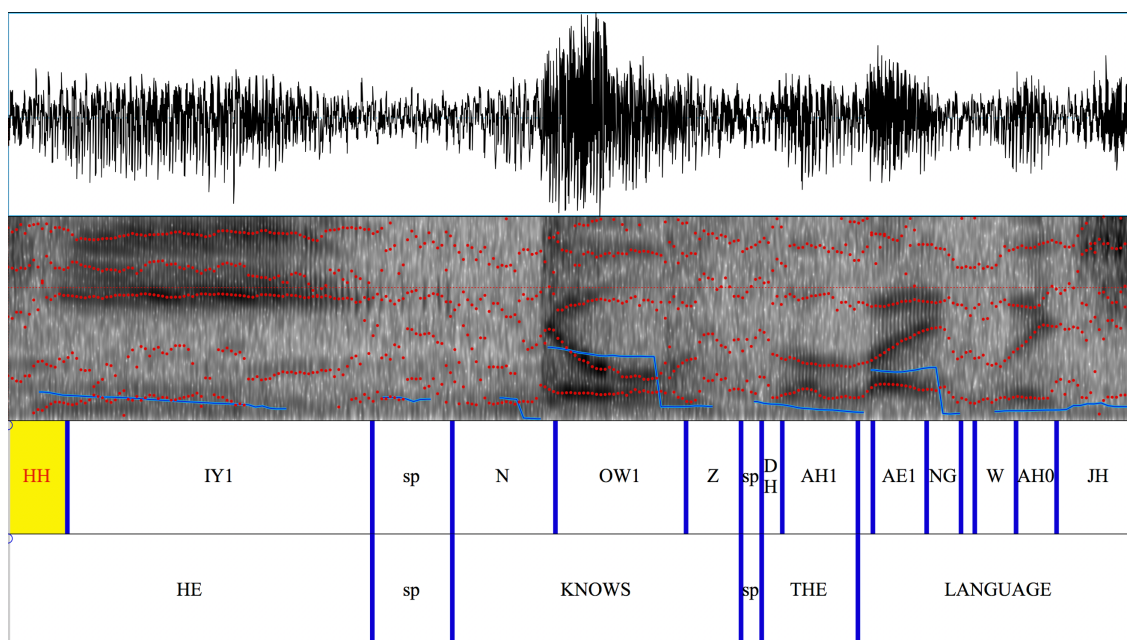


Figure 21 - Praat TextGrid of automatically aligned speech using the example phrase “he knows the language” from Guam English data

There are a number of precautions that were followed in order for FAVE Align to work as accurately as possible. The way in which the audio is transcribed significantly changes the accuracy of FAVE align.

- a) Orthographic transcriptions were *manually* compiled and edited, as this ensures a smaller likelihood of transcription errors in comparison to automated transcriptions (Bailey, 2016).
- b) The orthographic transcription was segmented into short annotations to improve accuracy, as potential errors in matching the transcription to the audio could then be limited to a shorter sound segment.
- c) Overlapping speech in the recording was transcribed on a separate tier in ELAN, as it could then be easily excluded²⁹ from the analysis whenever the overlapping speech caused the sound quality to be insufficient. It is possible for FAVE to mistakenly measure the sound values of one speaker while transcribing the speech of another. This can only be avoided by excluding overlapping speech from the analysis.
- d) In terms of vocabulary, slang terms or infrequent contractions may be aligned incorrectly by FAVE, but were included in the transcription, as they were filtered out at a later stage during data cleaning.
- e) In order to avoid mis-aligned vowels, a large part of the FAVE Align output was manually double-checked for errors. For a large dataset, this is a very time-consuming task and is for that reason often avoided in the analysis of big data, as manual corrections would simply not be feasible. However, since Guam English is a lesser known variety of English, and since this is the first formal description of the variety, a manual improvement of FAVE's alignment accuracy was desirable. This is an important step to ensure that FAVE can be used accurately not only on the varieties of English that it has been tested on, but also on lesser-known varieties. I performed an overview check for the vowel alignment for each informant included in the short front vowel analysis. For those speakers that only showed occasional inaccuracies, I corrected the alignment manually, though it is possible that not all alignment errors were discovered. Speakers who showed largely incorrect vowel

²⁹ FAVE Align can be done on specific ELAN tiers, without the inclusion of other tiers. The tier “transcriber’s comments,” for example, was not part of the analysis as it did not contain Guam English speech.

alignment were excluded from further analysis. An interesting finding of the overview check was that it was not necessarily the most non-standard speakers that were mis-aligned during the process of FAVE Align. Instead, I found that *speech rate* appeared to have a greater effect on the successful alignment process. This is in line with Bailey's (2016) finding, who reports that slower speech is favorable for accurate alignment. In the Guam English dataset that was used for the quantitative analysis, older speakers showed more non-standard speech, but they were also slow speakers, which facilitated the alignment. In comparison, I found more mis-alignment in the younger, more standard speakers who employed a faster speech rate³⁰.

4.3.3.1.2 FAVE Extract

After the automated vowel alignment, measurements of formants F1 and F2 were taken using an offline, command-line version of FAVE Extract. Though the measurements were taken at several vowel durations (20%, 35%, 50%, 65%, 80%), only the measurements at vowel midpoint were used for the quantitative short front vowel analysis. According to Evanini, Isard and Liberman (2009), measurements at nearly all points of the vowel duration (apart from the transition from/into the preceding/following sound) produce accurate measurements. The number of formants per vowel were automatically tracked and most often set between 3 and 6 (formant prediction method: Mahalanobis)³¹. Only vowels with a primary stress and with a duration longer than 0.05sec were measured.

Possible measurement errors can occur in FAVE Extract if the vowel was either misaligned or if the formants were inaccurately tracked, leading the measurements to be extracted from non-representative data points. This issue is especially likely to affect data from female speakers, where formant tracking can be less accurate (Jeff Mielke, personal communication, January, 2018). Particularly for the FLEECE vowel, measurement errors can occur as formants F2 and F3 are relatively similar in value, for which FAVE Extract occasionally hyper-corrects by tracking F2 values too low.

³⁰ This finding is based on impressions during the manual double-checking of FAVE Align's output data. The impressions were not corroborated in a quantitative way.

³¹ According to Evanini, Isard and Liberman (2009), automated formant tracking is a reliable tool for sociolinguistic research.

I refrained from manually evaluating and adapting the data produced by FAVE Extract, though that would be an option for error correction. Instead, I put the data through a relatively well-established automated process of pruning to ensure that outliers were excluded from the mean of the vowel. This process will be explained in *section 4.3.4 - Data Cleaning*.

4.3.3.1.3 The Benefits and Limitations of FAVE

Forced alignment has become a widely used method in variationist sociolinguistics, owing to its suitability for the time-efficient analysis of large datasets (Johnson, Di Paolo and Bell, 2018). It has been praised as “one of the most important methodological advances in modern-day sociolinguistics” (Bailey, 2016, p. 11). FAVE (along with other automated vowel measurement tools) has been tried and tested in several large-scale projects, as well as through comparative works. Most concluded that, if applied correctly, its advantages and potential, in comparison to traditional vowel analysis, far outweigh its disadvantages (Bailey, 2016; Fruehwald, 2013).

The number of tokens that are analyzed by FAVE far exceeds what would be possible in manual handling of the data. While Di Paolo, Yaeger-Dror and Beckford Wassink (2010), for example, suggest the manual analysis of only three tokens per vowel in each phonetic environment, FAVE allows for the analysis of many more tokens in a more time-efficient way. For the quantitative analysis in this study, for example, I was able to analyze between 142 and 206 tokens per vowel for each speaker (c.f. *Chapter 4, Results*).

The measurement is handled uniformly and objectively, employing complex algorithms (cf. Yuan, et al., 2013), whereas hand-measurement is often subjective and largely based on the researcher’s judgement of placing the vowel alignment. The latter may result in varying placements of the onset and glide measurement, whereas FAVE align follows an automated process of measuring the vowel at the same vowel durations each time.

FAVE is particularly well established for analysis of American English varieties as its model is mainly based on the American English SCOTUS corpus. Recent research has shown that FAVE also accurately aligns British English speech (MacKenzie & Turton, 2013). Provided the previously listed precautions are met, it is therefore likely that FAVE produces accurate measurements for other varieties of English as well. Though some of the older Guam English speakers are non-standard speakers due to substrate influence of their L1, Chamorro, their slow

speech rate facilitated accurate vowel alignment. Younger Guam English speakers show alignment with American speech (c.f. *Chapter 4 - Results*), for which FAVE has extensively been tested.

A notable limitation of FAVE is the fact that “catastrophic” errors can occur in the alignment process (Fruehwald, 2013, p. 190): Long annotations or frequently overlapping speech are only some of the reasons that can lead to complete mis-alignment of the transcription and the sound file. Many of those errors may be left unnoticed if a manual evaluation of FAVE’s output is not employed. However, some have argued that the consistency of forced alignment may make even the errors predictable (Kurtic et al., 2012 and Sikveland, et al., 2010, as cited in Johnson, Di Paolo, & Bell, 2018). More errors can be avoided by carefully cleaning the data before the statistical analysis. The latter step will be explained further in the following section.

4.3.4 Data Cleaning

The last step in processing the data was to ensure that the automatically measured values were as accurate as possible and that the chances of including either misaligned or inaccurately measured tokens was low. For that purpose, several steps were taken:

- 1) Words that were potentially coded wrongly by FAVE were excluded from the analysis. This included mostly function words and high-frequency words, as they have been suggested to be part of a divergent lexical class (Di Paolo, Yaeger-Dror, and Beckford Wassink, 2010): Vowels in function and high-frequency words are likely to be reduced to schwa as they are often unstressed in natural speech. FAVE, however, might code them as full vowels. Guam-specific local terminology that showed either alternative stress patterns or unstressed vowels, possibly due to abbreviation, was also excluded. *Hagåtña*, for example, the name of the capital of Guam, is pronounced differently by a number of informants. The Chamorro pronunciation [hə'gəɽɲə] as well as the English [aganjə] or [əganjə] showed variation that was likely to cause coding errors by FAVE. A complete list of words that were excluded from the analysis can be found in the appendix.
- 2) Exploratory vowel plots were created in order to find out whether the individual measurements of the short front vowels showed significant outliers. The vowel plots were visually analyzed for each speaker. This method, for example, revealed that the missing vowel category “NEAR” caused clusters of /i/ in pre-r environments in the vowel plots of KIT, where the vowel was automatically allocated to for that environment. I then manually

allocated pre-r instances of /i/ to the FLEECE category, which reduced the distance between the outlier group (e.g. in the word “here”) and the other analyzed FLEECE tokens but did not eliminate it entirely.

- 3) Finally, the mean F1 and F2 values of each front vowel TRAP, KIT and DRESS, as well as the two reference vowels FLEECE and FACE were calculated and any values that fell outside two standard deviations of the mean were excluded from the analysis. This decision was based on the assumption that “any measurement that is up to two standard deviations different from the mean value is within the realm of what we might reasonably expect to occur” (Kretzschmar and Schneider, 1996, p. 21).

There are other methods that are frequently employed to ensure that FAVE Align and FAVE Extract targeted the right data points. Some researchers prefer to revisit the data that was produced by FAVE Extract and to re-align and re-measure outliers (cf. Drager, 2013). This method allows for a detailed insight into each individually extracted token, while being a very time-consuming task. In comparison, the data cleaning methods I employed are more time-efficient and do not rely on a subjective opinion of what constitutes an outlier. Rather, the cleaning process is generalized and employed the same way for all speakers. Both methods have been employed frequently in sociolinguistic research and it ended up being a matter of personal preference to use the above described method.

4.3.5 Normalization

Once the data was cleaned and judged as being representative of the speakers in a satisfactory way, the midpoint vowel measurements were normalized to account for inter-speaker variation. Using R³², a slightly modified version of Lobanov’s (1971) vowel-extrinsic/speaker-intrinsic normalization formula, also referred to as z-scoring, was employed. As a long standing normalization method, it has been used frequently and evaluated highly in factoring out physiologically caused speaker differences while retaining valuable insight into sociolinguistic differences (Thomas & Kendall, 2007-2015; Adank, Smits and van Hout, 2004). In the regular

³² R Development Core Team (2008). R: A language and environment for statistical computing. *R Foundation for Statistical Computing*, Vienna, Austria. ISBN 3-900051-07-0, URL <http://www.R-project.org>.

Lobanov formula, for each vowel token, its F1 measurement is used and the mean of F1 for the full vowel space is subtracted from it. This value is then divided by the standard deviation of F1. The same procedure is done for F2. In this analysis, the modification from the regular Lobanov formula lies in the process of subtracting the F1 or F2 mean of vowel specific means, rather than that of the full vowel space. In other words, first, the mean of each individual vowel class (TRAP, KIT, DRESS etc.) was calculated and only based on those means, the mean of the entire vowel space was calculated. The reason for this modification is that in conversational data, different speakers can have varying numbers of tokens for each vowel, which can affect their grand means (Dodsworth, 2018, personal conversations). The final values are labelled as *z1midpoint* and *z2midpoint*, representing the normalized value of F1 and F2 respectively, using the measurements at vowel midpoint. It is important to keep in mind that Lobanov normalization does not produce values measured in Hz. A scaling process would be necessary to produce this measure.

For the statistical analysis, the normalized F1 and F2 values were combined into one value, to create a quantity that simultaneously provides information about both the height and frontness of the vowel. The combined value is the subtraction of the normalized F2 value (*z2midpoint*) from the normalized F1 value (*z1midpoint*). The result is a number scattered around zero. Positive values represent a higher and fronter vowel, negative values represent a lower and backer position. This allows for easier comparison of the speakers' vowel production to social factors and can be used to analyze change over time in vowels that have been reported to move along the front diagonal of the vowel space (Fruehwald, 2013).

4.3.6 Statistical Analysis

The statistical analysis was conducted using the program R. A fitting mixed effects model was chosen to confidently answer the following research question: Which social factors (*age, level of education, sex and the interaction between age and sex*) and linguistic factors (*phonological environment*) have a significant influence on the position of the Guam English vowels KIT, DRESS, TRAP, FLEECE and FACE in the vowel space?

A mixed effects model consists of a combination of both fixed and random effects. The fixed effects, in this case, are the social factors *age, level of education, sex*, and the *interaction between age and sex*, as well as *phonological environment*. The random effects are the *speaker* and the *word* in which the analyzed vowel is used. Including random effects account for the fact

that vowel production is likely to differ more across speakers and across different words and consequently is likely to be more similar within one speaker and within the same word category. The mixed effects model was run individually for each vowel, including the same list of independent variables (with the exception of the model for TRAP, which was treated slightly differently, as described in the next section).

Each vowel was analyzed in all phonetic environments detected by FAVE. The number varies depending on the vowel. For DRESS, KIT and FACE, FAVE distinguished between 19 phonological environments; for FLEECE, 20 phonological environments were considered and for TRAP, 17 were considered, but later reduced to only two categories – pre-nasal and pre-oral. A table of all environments including example words is listed for each vowel in tables 22-26. Note that FAVE automatically classified alveolar places of production as “apical.”

In the statistical model, the phonological environment was considered as *one* factor with 17 to 20 different categories, depending on the vowel. Following the method of Drager (2013), I did not exclude pre-nasal tokens, which is contrary to what Labov, Ash and Boberg (2006) suggest for linguistic analysis, as they generally excluded pre-nasal tokens for FLEECE, DRESS, TRAP and MOUTH in their research. The tracking of a potential nasal system was of particular interest for vowel TRAP, since Guam English speakers are potentially assimilating toward an American regional English where the presence or absence of a nasal split is one notable linguistic difference between Caucasians and other ethnic groups (particularly in the California region, see Cheng, Faytak and Cychosz, 2016). A nasal split in TRAP additionally makes up an essential part of the California Vowel Shift in Caucasian speakers but not in other ethnic groups.

Testing the effects of the phonological environment was treated slightly differently for the vowel TRAP, for the above mentioned reasons. A reduced form of the model used for the other vowels was employed for TRAP. The 17 different phonological environment were simplified into two categories – pre-nasal and pre-oral. This reduced factor of the phonological environment was additionally tested for interactions with the social factor *age*, to gain more information about potential generational differences in a nasal system. This particular focus on a potential nasal system was only applied to the vowel TRAP, following the methods of previous studies who also treated this vowel slightly differently compared to other vowels, where a nasal system is not commonly reported (c.f. Cheng, Faytak and Cychosz (2016))

KIT	
<i>phonological environment</i>	<i>example word</i>
voiced palatal affricate	originally
voiceless palatal affricate	which
voiced apical fricative	visit
voiceless apical fricative	history
voiceless interdental fricative	myth
voiced labiodental fricative	give
voiceless labiodental fricative	different
voiced palatal fricative	decisions
voiceless palatal fricative	dishes
voiced apical lateral	really
voiced apical nasal	finishing
voiced labial nasal	implemented
voiced velar nasal	think
voiced apical stop	kids
voiceless apical stop	little
voiced labial stop	siblings
voiceless labial stop	chips
voiced velar stop	big
voiceless velar stop	click

Figure 22 - List of phonological environments for the vowel KIT.

DRESS	
<i>phonological environment</i>	<i>example word</i>
voiced palatal affricate	legislator
voiceless palatal affricate	fetch
voiced apical fricative	presents
voiceless apical fricative	guess
voiced interdental fricative	together
voiceless interdental fricative	death
voiced labiodental fricative	whatever
voiceless labiodental fricative	nephew
voiced palatal fricative	measures
voiceless palatal fricative	flesh
voiced apical lateral	well
voiced apical nasal	central
voiced labial nasal	memories
voiced apical stop	wedding
voiceless apical stop	let
voiced labial stop	February
voiceless labial stop	step
voiced velar stop	exited
voiceless velar stop	Texas

Figure 23 - List of phonological environments for the vowel DRESS.

TRAP	
<i>phonological environment</i>	<i>example word</i>
voiced palatal affricate	graduated
voiced apical fricative	hazardous
voiceless apical fricative	passed
voiced interdental fricative	rather
voiceless interdental fricative	catholic
voiced labiodental fricative	having
voiceless labiodental fricative	after
voiced apical lateral	value
voiced apical nasal	cancer
voiced labial nasal	family
voiced velar nasal	language
voiced apical stop	bad
voiceless apical stop	chat
voiced labial stop	grabbed
voiceless labial stop	Baptist
voiced velar stop	bag
voiceless velar stop	accent

Figure 24 - List of phonological environments for the vowel TRAP.

FLEECE	
<i>phonological environment</i>	<i>example word</i>
word-final	three
voiced palatal affricate	regional
voiceless palatal affricate	teachers
voiced apical fricative	these
voiceless apical fricative	niece
voiced interdental fricative	either
voiceless interdental fricative	teeth
voiced labiodental fricative	weave
voiceless labiodental fricative	beef
voiced palatal fricative	Micronesia
voiceless palatal fricative	leash
voiced apical lateral	real
voiced apical nasal	mean
voiced labial nasal	seamstress
voiced apical stop	obedient
voiceless apical stop	treat
voiced labial stop	cerebral
voiceless labial stop	people
voiced velar stop	league
voiceless velar stop	speak

Figure 25 - List of phonological environments for the vowel FLEECE.

FACE	
<i>phonological environment</i>	<i>example word</i>
voiced palatal affricate	age
voiceless fricative	greyhound
voiced apical fricative	ways
voiceless apical fricative	basically
voiced interdental fricative	bathe
voiceless interdental fricative	faith
voiced labiodental fricative	navy
voiceless labiodental fricative	safety
voiced palatal fricative	Caucasian
voiceless palatal fricative	educational
voiced apical lateral	jail
voiced apical nasal	brain
voiced labial nasal	came
voiced apical stop	made
voiceless apical stop	states
voiced labial stop	maybe
voiceless labial stop	paper
voiced velar stop	Vegas
voiceless velar stop	take

Figure 26 - List of phonological environments for the vowel FACE.

Applying statistical analysis to a dataset of only 40 speakers implies that a few cautionary actions need to be taken. While 40 speakers is not an unusual size for a study in sociolinguistics, statistical analysis works best if applied on much larger data. The negative consequences of a smaller sample size are that great weight is given to individual datapoints and there is potential for empty social groups in the data (e.g. young females with a low education level might be missing in the collected sample). This can lead to statistically significant results that only emerge due to a skewed dataset and not because of real tendencies. Ways to prevent this are, for one, to collect a dataset that is most representative of the studied community as a whole. That way, the few speakers that are expected to represent their social categories are in fact accurate representations thereof. Furthermore, the number of social factors that are considered for the statistical model need to be limited to avoid potentially empty groups. The development of the field toward “big data” collection may be another way around this issue, though it comes with a whole new set of potential for errors that will not be discussed here (c.f. Britain, et al., 2016; Leemann, Kolly, Purves, Britain, and Glaser, 2016).

As for the social factors considered in this statistical model, the analysis followed the principle of employing a minimal amount of independent variables, but as many as necessary to confidently evaluate social stratification in the short front vowel production. Based on this principle, not all of the speakers’ social characteristics that were established during the data collection could be included in the statistical analysis. *Ethnicity*, *mobility* and *education type* (public or private school), for instance, were not included in the model, because (among other reasons) the low number of data points in each group would have made statistical analysis very unreliable. To give an example: The dataset consisted of only eight Chamorros that had left the island for more than a year (i.e. they were considered *mobile*). Out of those eight speakers, only three were male and none were below the age of 40. If the model had produced significant results for the factors *age* and *mobility*, the results could have either been interpreted as a real social effect, or just as well simply as an effect of a skewed dataset.

The social factors that were included in the analysis were therefore only those that provided a sufficient amount of observation points and that were most likely to have an effect on vowel production, either based on tendencies found in the overview description of Guam English, or tendencies found in previous sociolinguistic research. *Age* was assumed to have an effect on the short front vowel production because of the generational shift from English being an L2 to being

an L1, described in *section 3.8.1 - Language Shift*. It was treated as a numerical factor, as opposed to a categorical one, as a way of avoiding ambiguous age groups or potentially empty categories. *Sex* was categorized into male and female speakers and was included as an alone-standing factor, as well as in interaction with *age*. Both sex and age have been found to have an effect on vowel changes in previous sociolinguistic research (e.g. Trudgill, 1983; Fridland, 2001; Kennedy and Grama, 2012). *Level of education* was treated as a categorical variable, distinguishing between *basic* and *higher* education. *Basic education* consisted of speakers with primary and secondary education, *higher education* consisted of speakers with a tertiary education. Primary and secondary education were collapsed into one category, due to the fact that the dataset consisted of only one speaker with primary education, which would have led to many essentially empty social categories in the analysis.

To check whether the model was fitting for the data, diagnostic plots were created. Simply put, the purpose of the diagnostic plots was to check whether the model accurately predicted what was found in the data and that no errors in the model were systematically connected to the variables. Finally, the speaker's social factors were tested for normal distribution. The tests showed that the chosen statistical model was fitting for the dataset.

Due to potential limitations that come with a statistical analysis, I would like to stress the importance of analyzing quantitative linguistic data in light of qualitative and ethnographic observations. My conclusions on the sociolinguistic profile of Guam English and the developmental trajectories of the variety are based not only on the quantitative results, but also on the observations I have made about the language and culture of Guam during fieldwork as well as in the more qualitative overview analysis of the variety. This approach follows the idea of Drager and Hay (2012, p. 64) concerning quantitative linguistic analysis:

Quantification loses the detail and descriptive features that make qualitative data so valuable; numbers on a scale can only go so far in explaining who someone is. While biographical descriptions can also only go so far, they can evoke images and emotions usually lacking in numbers: images and emotions that are important in understanding how a person identifies.

I agree with the researchers' approach to interpret quantitative results with care and only accept it as one piece of the puzzle that makes up linguistic research.

4.3.7 Overview of The Data Subset

The subset consists of 40 Chamorro speakers: 19 males and 21 females, ranging between the ages of 16 and 91 years old, with a rather large portion being below the age of 35 (see fig. 27 for age distribution). Similarly to the entire dataset, this subset also consists of rather highly educated speakers with 18 speakers (45%) having a higher education level and 18 speakers (45%) having basic education, among which only one speaker has a primary education level and 17 speakers have a secondary education level. For four speakers in the subset (10%), information about the educational background is unavailable. The education level is not entirely evenly distributed, as fig. 28 shows. Virtually none of the older speakers have a tertiary education level. The effect that the essentially empty social category of older speakers with tertiary education might have on the results was discussed in the methods chapter. A spreadsheet with details on the speakers of this subset is listed in table 8, sorted by the speakers age (youngest to oldest), with different shading for the two levels of education.

Speaker	Sex	Age	Year of Birth	Level of Education
Gu26f16	f	16	2000	basic (secondary)
Gu60m16	m	16	2000	basic (secondary)
Gu47f17	f	17	1999	basic (secondary)
Gu25m18	m	18	1998	higher
Gu28f18	f	18	1998	higher
Gu27m19	m	19	1997	higher
Gu11m22	m	22	1994	basic (secondary)
Gu31f22	f	22	1994	basic (secondary)
Gu49f22	f	22	1994	higher
Gu16m23	m	23	1993	higher
Gu22f23	f	23	1993	higher
Gu46f23	f	23	1993	higher
Gu30f24	f	24	1992	higher
Gu33m25	m	25	1991	higher
Gu40f26	f	26	1990	--
G24m27	m	27	1989	higher

Speaker	Sex	Age	Year of Birth	Level of Education
Gu6f27	f	27	1989	higher
Gu39m28	m	28	1988	basic (primary)
Gu7m29	m	29	1987	higher
Gu18m31	m	31	1985	basic (secondary)
Gu38f33	f	33	1983	basic (secondary)
Gu63m33	m	33	1983	basic (secondary)
Gu32f39	f	39	1977	higher
Gu42m43	m	43	1973	basic (secondary)
Gu29m44	m	44	1972	higher
Gu21m51	m	51	1965	higher
Gu59m55	m	55	1961	basic (secondary)
Gu17f58	f	58	1958	--
Gu10f59	f	59	1957	higher
Gu45m60	m	60	1956	higher
Gu19f61	f	61	1955	basic (secondary)
Gu51m61	m	61	1955	basic (secondary)
Gu14m69	m	69	1947	higher
Gu62f69	f	69	1947	basic (secondary)
Gu13f71	f	71	1945	--
Gu12f73	f	73	1943	--
Gu58f80	f	80	1936	basic (secondary)
Gu55f83	f	83	1933	basic (secondary)
Gu57m88	m	88	1928	basic (secondary)
Gu44f91	f	91	1925	basic (secondary)

Table 8 - List of Chamorro informants used for acoustic analysis, sorted by age. Speakers shaded in grey indicate basic education levels, speakers shaded in white indicate higher levels of education. For some speakers, information on the education level was not available.

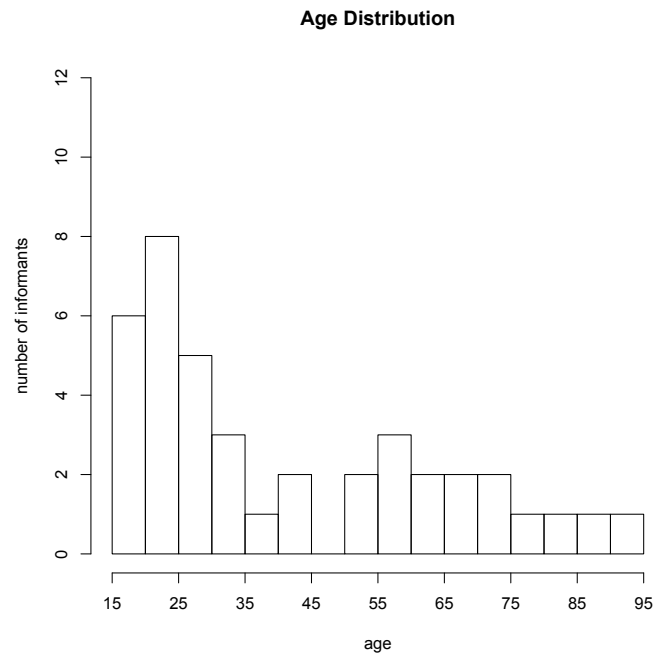


Figure 27 - Age distribution of the Chamorro subset included in the acoustic analysis. A considerable part of the analyzed speakers are below the age of 35, making this data subset slightly skewed. for statistical analysis, but not unlike Guam's population, for which approximately 60% are below the age of 35 (U.S. Census Bureau, 2012).

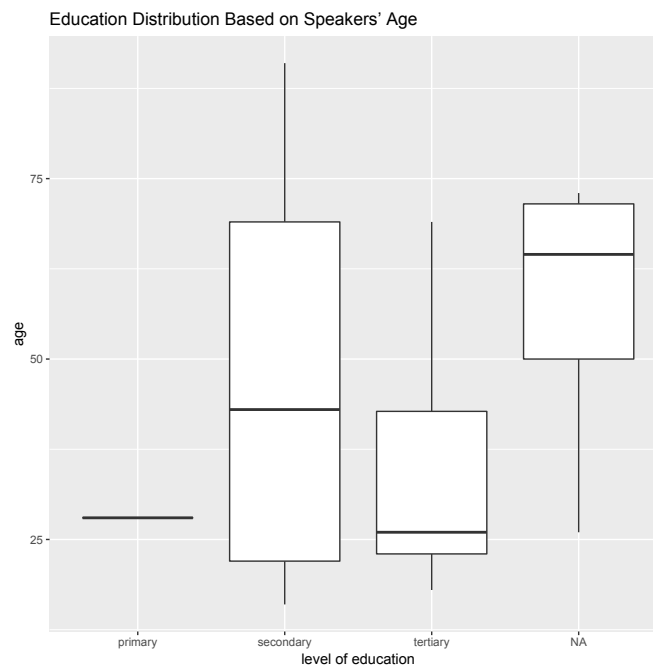


Figure 28 - Education distribution based on the speakers' age. The largest group of speakers has a secondary education. The group of speakers with a tertiary education is limited to younger speakers and the group of speakers with a primary education is essentially empty, with the exception of one speaker. A considerable number of speakers did not disclose their education level.

5 Chapter Four - Results

In this chapter, I will present a linguistic analysis of Guam English. Firstly, I will provide an overview of Guam English, based on the entire Guam English dataset, with local Chamorro, Filipino and Caucasian speakers. In this section, I will describe the general linguistic profile of the variety, including comments on phonetics and phonology, morpho-syntax, lexis, stress and intonation, as well as non-verbal communication. This is intended to function as a first account of Guam English. Secondly, I will go into a more detailed presentation of the Guam English short front vowels of a sub-sample of speakers, the Chamorros. I will provide a systematic analysis of influential social factors (*age, sex, level of education*) and the phonological environment on the position of the short front vowels KIT, DRESS and TRAP, as well as two reference vowels, FLEECE and FACE. Finally, I will present case studies of four young male informants, with the intention to document the broad spectrum of variation that persists on the island; especially between basilectal and acrolectal speakers of the same ethnic group, as well as between different ethnic groups. This last part includes both an overview description of the speakers similar to the first section of this chapter, as well as a closer look at their short front vowel production, similar to the second section of this chapter.

The findings presented here will be summarized and interpreted after each sub-chapter and further discussed in *section 5.4 - Developmental Trajectories of Guam English*, where I will reflect on the Guam English system in comparison to other L2 Englishes, the most relevant American English varieties, as well as Chamorro. Concerning the latter, I will add comments whenever similarities between Guam English (most often in the older generations) and Chamorro are notable.

5.1 Part One - Linguistic Overview of Guam English

The main finding of the overview analysis of Guam English is that this variety in many ways resembles an American variety. The phonetic and phonological, morpho-syntactical, lexical and intonational features all follow an American standard, but show variable divergence from it, which is especially found in older speakers, who consider Chamorro to be their L1 and in basilectal speakers of all age groups. Due to the overall resemblance to the linguistic profile of the colonizer,

the U.S., many of the features mentioned here, will be discussed in comparison to a general, standard American English³³, but in some instances also to other World Englishes.

5.1.1 *Phonology*

5.1.1.1 *Vowels*

In this section, I will mainly comment on those vowel features that a majority of Guam English speakers shares. Table 9 presents an overview of the vowel production of Guam English alongside General American English (according to Wells, 1982). Some of the most saliently different vowel productions in comparison to Standard American English are the lower, centralized production of TRAP, with an apparent lack of a nasal split, the high, front production of KIT and the persistent monophthongization of FACE and GOAT³⁴. There is a notable difference between the vowel production of older speakers, who often speak Chamorro or a Filipino language as a first language, younger basilectal L1 English speakers and younger acrolectal L1 English speakers. The vowel production of substrate languages may have an influence on some of the non-standard productions discussed here and will be mentioned as a side comment whenever necessary. Note that Guam English is not limited to five or six vowels as found in many lesser known varieties of English (c.f. Low and Hashim, 2012).

³³ The vagueness of the terms “standard” and “general” American English will be elaborated on in more detail throughout this thesis, as I hope to give more specific insight into what variety of American English Guam English is most similar to.

³⁴ As will be discussed in *section 4.5 - Developmental Trajectories of Guam English*, none of these vowel features are entirely absent in American English. Rather, they give insight into assimilation towards potential regional or ethnic American varieties. Additionally, the production of the vowel KIT is changing in apparent time, suggesting a less high-front position in younger generations.

<i>Lexical Set</i>	<i>Guam English</i>	<i>General American English</i> (Wells, 1982, p. 121)
KIT	[ɪ] > [ɪ̥], [ɪ̥]	[ɪ]
DRESS	[ɛ] > [ɛ̥]	[ɛ]
TRAP	[a]	[æ] ³⁵
LOT ³⁶	[ɑ] > [ɑ], [ɔ]	[ɒ] ³⁷
STRUT	[ʌ] > [ʌ̥]	[ʌ]
FOOT	[ʊ], [u] > [ʊ]	[ʊ]
BATH	[a]	[æ]
CLOTH	[ɑ] > [ɔ]	[ɔ]
NURSE	[ɜ]	[ɜr]
FLEECE	[i]	[i]
FACE	[e]	[eɪ]
PALM	[ɑ]	[ɑ]*
THOUGHT	[ɑ] > [ɔ]	[ɔ]*
GOAT	[o] > [oo]	[o] ³⁸
GOOSE	[u] > [ʊ]	[u]
PRICE	[aɪ]	[aɪ]
CHOICE	[ɔɪ]	[ɔɪ]
MOUTH	[aʊ]	[aʊ]
NEAR	[i̯]	[ɪr]
SQUARE	[ɛɪ]	[ɛr]
START	[ɑ̯]	[ɑr]
NORTH	[ɔ], [o̯], [ɑ̯] ³⁹	[ɔr]
FORCE	[ɔ], [o̯]	[ɔr]
CURE	[o̯] (jʊ̯)	[ʊr]
HappY	[i]	[ɪ] ⁴⁰
LETTER	[ɜ̯]	[ɜ̯]
commA	[ə]	[ə]

Table 9 - Vowel production of Guam English alongside General American English *not followed by /r/

³⁵ Though not noted in (Wells, 1982), /æ/ is produced in a high and front manner ([æ̠]) in many regional U.S. dialects, particularly in the pre-nasal environment (Labov, Rosenfelder and Fruehwald, 2013). This feature is much less common in Guam (see further explanation in the section on Mid and low front vowels: SQUARE, DRESS, TRAP, BATH)

³⁶ A potential LOT/THOUGHT merger as it is frequently found in the U.S. (Labov, Ash and Boberg, 2006) will be discussed briefly, but cannot be commented on conclusively, as the analysis is only based on auditory impressions and no quantitative analysis was performed on these two vowels.

³⁷ In more recent reports on American English, LOT is defined as unrounded /ɑ/ (Labov, Ash, & Boberg, 2006, p. 58).

³⁸ Wells (1982) lists GOAT only as a monophthongal vowel, in other reports, it is considered diphthongal, but not a “true” diphthong (Labov, Ash and Boberg, 2006, p. 12).

³⁹ For some words, [ɔ] and [o̯] are replaced by [ɑ̯], perhaps due to the preceding phonetic environment or because of spelling pronunciation (*war* [wɑ̯], *quarter* [ˈkwɑ̯-təɪ])

⁴⁰ Though not noted as such in Wells (1982), the production of happY could also be considered [ɪ] in American English.

5.1.1.1.1 High front vowels: FLEECE, KIT, happY, NEAR

FLEECE is generally realized as [i]. Occasionally, it is relatively short, but I only observed this in older speakers of a Chamorro ethnic background (*people* [pīpəl]). KIT is generally realized as [ɪ]. Occasionally, it is raised ([ɪ]); in older speakers it is raised even to the point where it resembles FLEECE (*ship* [ʃip]), which was also reported in Gaynell Pool Layne (1970) and Quan (2010). KIT [ɪ] is also raised in unstressed syllables before velars (*yelling* [ˈjɛlɪŋ]), *running* [ˈrʌnɪŋ]). Mostly older and more basilectal speakers of both the Chamorro and Filipino ethnic group show raising of KIT. The vowel is lowered to a more standard position in younger and more acrolectal speakers. The production of NEAR [ɪɹ] resembles that of General American English (Wells, 1982). HappY is produced as [ɪ] or sometimes raised to [ɪ].

5.1.1.1.2 Mid and low front vowels: SQUARE, DRESS, TRAP, BATH

SQUARE is generally rhotic, [ɛɹ], though I have found *where* [wɛə] and *there* [ðɛə] to occasionally be produced with schwa, mainly in older Chamorro speakers. DRESS [ɛ] is produced similarly to General American English in older as well as younger speakers, including a slightly higher realization in older speakers and a slightly lower realization in younger speakers, regardless of their ethnic background. I observed a subtle (i.e. with lexical constraints) version of the KIT/DRESS merger, but only in a Caucasian speaker who had grown up in Guam, but whose family was from North Carolina, where the merger is commonly found. TRAP [a] is produced low and central in all phonetic environments (*land* [land], *bag* [bag]), though not low enough to become [ɑ:]. This lower and backer production is found across all age groups and including speakers who have lived off-island for a considerable time. However, the post WW2 generation shows signs of a fronter TRAP vowel in pre-nasal environments, as the results of the quantitative analysis of the vowel suggest. In auditory analysis, however, this generational difference was not evident.

Only in few older Filipino informants, did I note TRAP to be produced as [ɑ]. BATH is produced as [a], suggesting a merger with TRAP.

5.1.1.1.3 Low back vowels: START, PALM, LOT, THOUGHT, CLOTH

START is produced as [ɑɹ], similar to General American English. PALM, LOT, THOUGHT and CLOTH all appear to be produced as unrounded [ɑ] (*drama* [ˈdramə], *box* [baks], *bought* [bat],

lost [last], *grandma* ['gɪama]), but their production varies greatly, including realizations as [ɔ], [ɔ̞], [ɔ̠], [a] and [ɑ]. The vowel position appears to be especially low and back (*box* [bɑks]) or rounded (*office* [ɔfis]) in both older speakers and younger basilectal speakers of the Chamorro ethnic group. To illustrate a possible merger of LOT and THOUGHT, figs 29-32 show the LOT and THOUGHT vowels along with three reference vowels (FLEECE, TRAP and GOOSE)⁴¹. The figures show vowel plots of an older Chamorro male speaker, a younger Chamorro male speaker, an older Chamorro female speaker and a younger Chamorro female speaker. All four speakers show considerable overlap of the two vowels with younger speakers potentially showing slightly more overlap.

⁴¹ CLOTH and PALM were not considered as separate vowels in the automated vowel analysis and are therefore not plotted here.

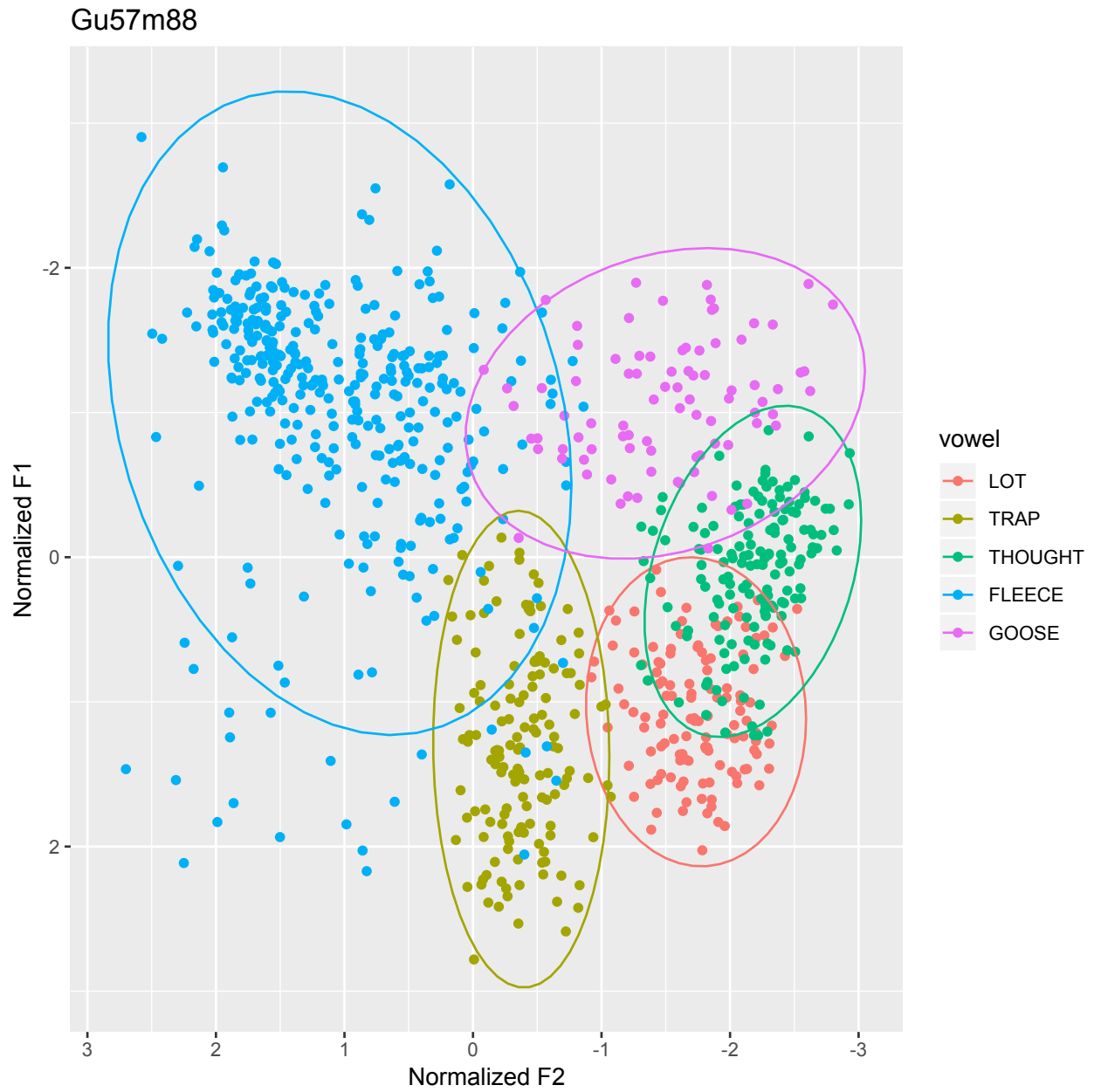


Figure 29 - Vowel plot of older male Chamorro speaker with partially overlapping LOT and THOUGHT vowels (speaker code: Gu57m88).

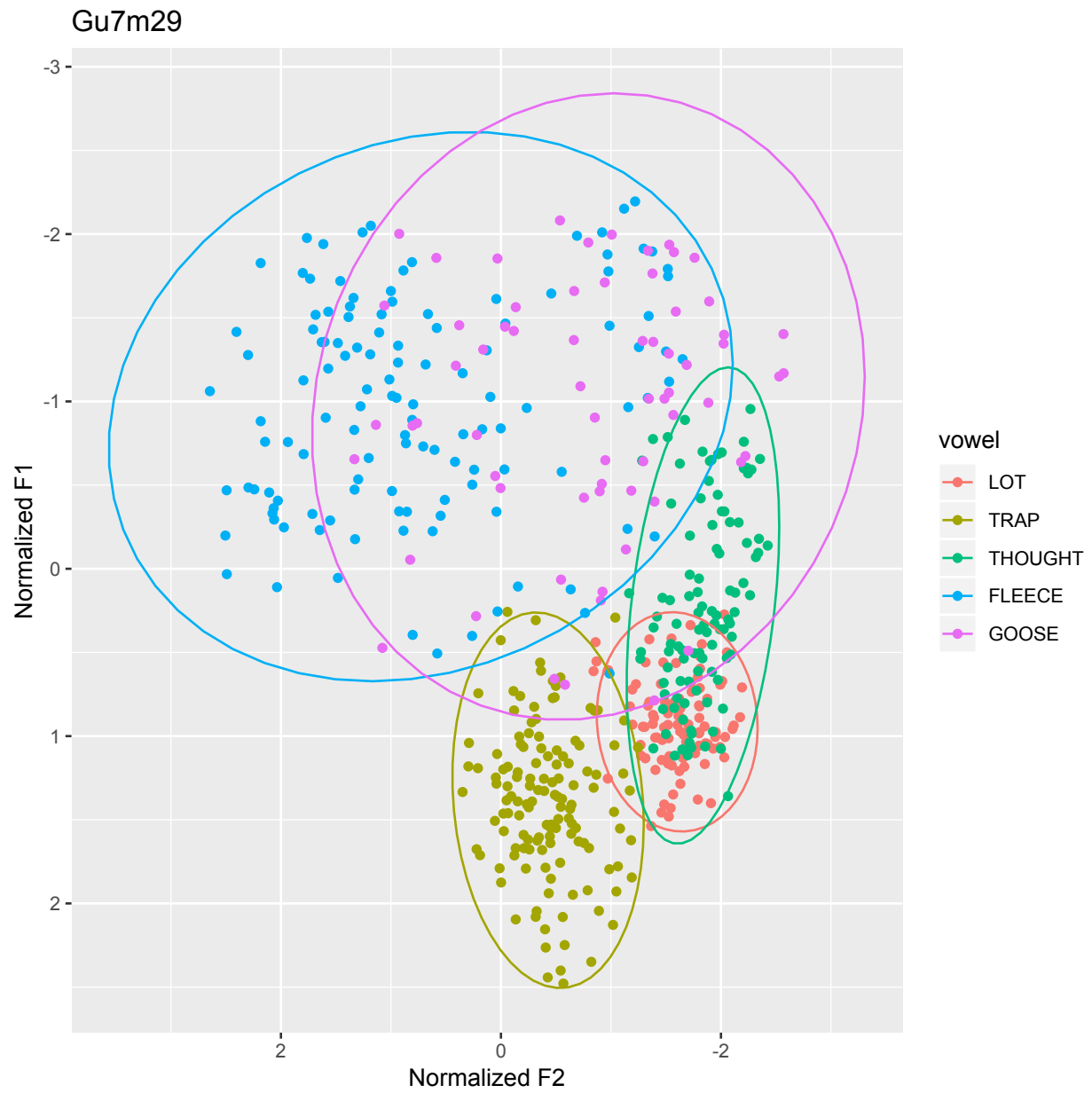


Figure 30 - Vowel plot of younger male Chamorro speaker with considerable overlapping of LOT and THOUGHT (speaker code: Gu7m29).

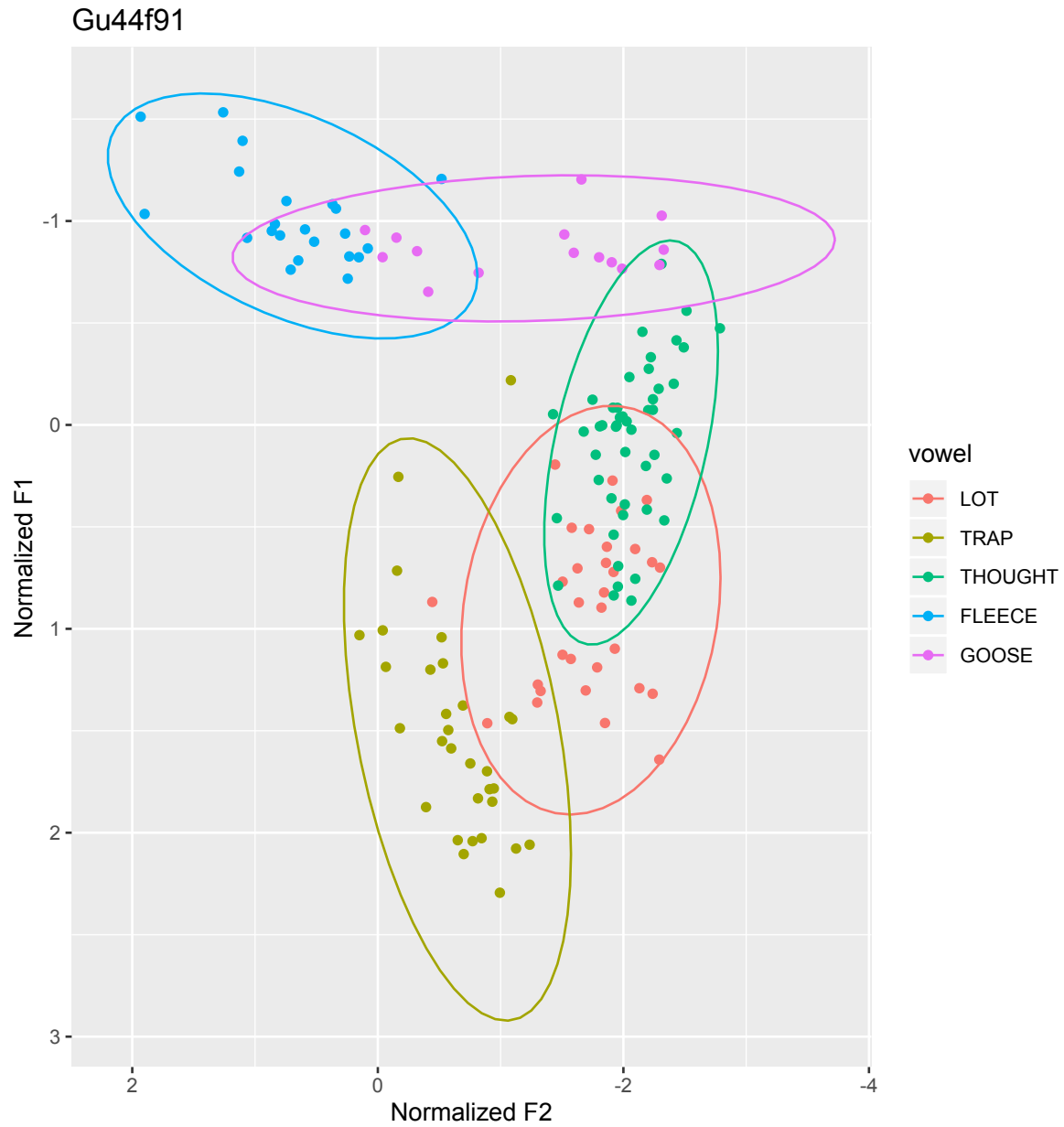


Figure 31 - Vowel plot of older female Chamorro speaker with partially overlapping LOT and THOUGHT vowels (speaker code: Gu44f91).

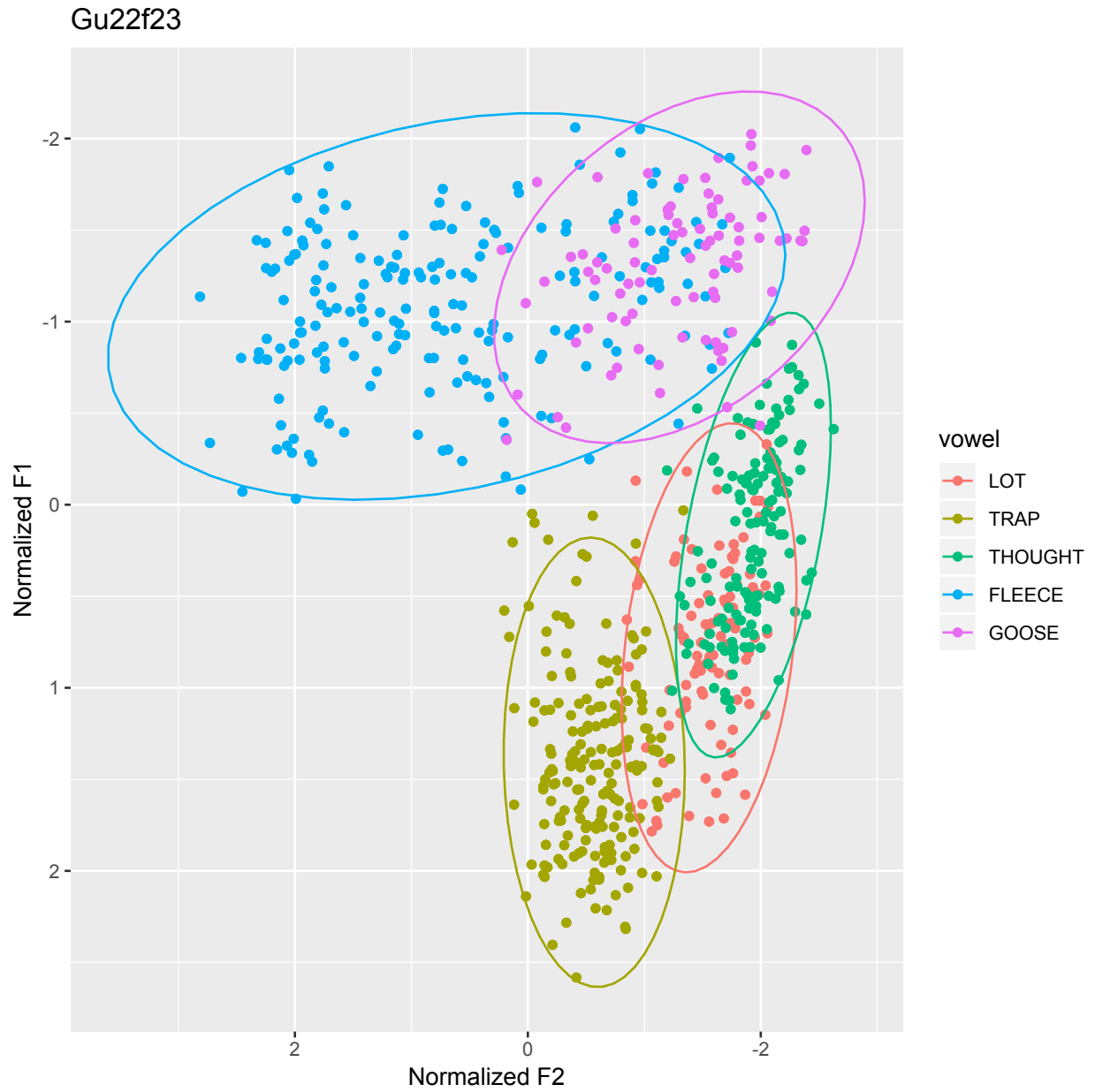


Figure 32 - Vowel plot of younger female Chamorro speaker with considerable overlapping of LOT and THOUGHT (speaker code: Gu22f23).

5.1.1.1.4 High back vowels: FOOT, CURE, GOOSE. NORTH, FORCE

STRUT is produced as [ʌ]. Occasionally, it is slightly rounded, most notably in older speakers of the Chamorro ethnic group (*front* [fɪʌnt]). GOOSE is produced as [u] (*move* [muf]) and not commonly fronted, apart from a few exceptions (*dude* [dūd]). FOOT is occasionally closed, central and rounded, particularly in older speakers, but can also be fronted ([ʊ] or [ʊ̟], *foot* [fʊt]). The realization of CURE is difficult to judge as it only rarely occurred in the dataset, but appears to be produced as [ʊ̟] (*cure* [kjʊ̟]). NORTH is produced as [ɔɪ] (*fork* [fɔɪk], *corn* [kɔɪn]) and in some instances as [ɑɪ], possibly dependent on the pre-vocalic environment or because of spelling pronunciation (*war* [wɑɪ], *quarter* [kwɑɪtər]). NORTH and FORCE are generally merged.

5.1.1.1.5 Central Vowels: NURSE, STRUT, lettER, commA

NURSE is produced as [ɜɪ]. The realizations of lettER and commA are [ə̞] and [ə̟]. Full vowels are occasionally used for schwa in unstressed syllables (*teacher* [titʃɛɪ]), mostly in older speakers. In some instances, schwa is entirely omitted (*officer* ['ɒfsər], *basketball* ['bask, bəl]).

5.1.1.1.6 Diphthongs

GOAT is realized as [o:], i.e. it is monophthongized, in older as well as in younger speakers (*joke* [dʒo:k], *home* [ho:m]) with only few exceptions. FACE is monophthongized or short-glided in older as well as younger speakers [e:] (*late* [le:t], *age* [e:dʒ]). Gaynell Pool Layne (1970, p. 104) reports a *let/late* merger in her findings of English spoken by Chamorros, which may be referring to a monophthongization as well. PRICE, MOUTH and CHOICE are produced, [aɪ], [aʊ], [ɔɪ], i.e. as diphthongs, in all phonetic environments (*price* [praɪs], *boy* [bɔɪ], *south* [sauθ]).

5.1.1.1.7 Vowel Visualization

The following vowel plots illustrate the vowel productions of representative Guam English speakers, including one older and younger, male and female speaker for each ethnic group (Chamorro, Filipino, Caucasian). This ought to give a general overview of the Guam English speech community as a whole. Diphthongs were not included in the vowel plots.

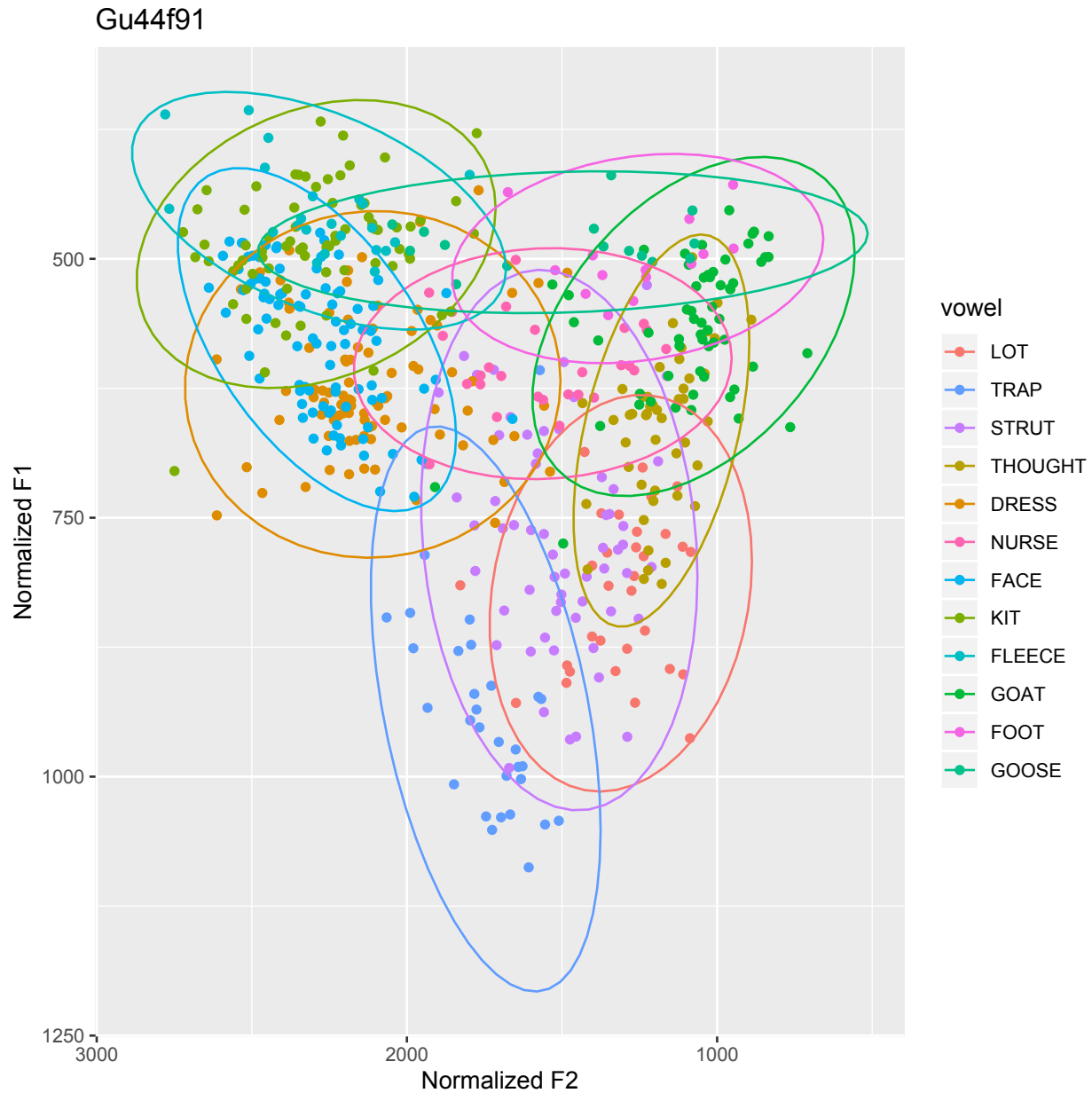


Figure 33 - Vowel space of an older female Chamorro (speaker code: Gu44f91).

A number of features distinguish this speaker (Gu44f91) from a more standardized one: KIT and FLEECE show almost complete overlap, but may be distinguished by length. DRESS does not appear to be produced particularly low as found in younger Guam English speakers, LOT and THOUGHT show some degree of overlap. This older speaker shows a large spectrum of GOOSE, indicating that it may be fronted in some instances.

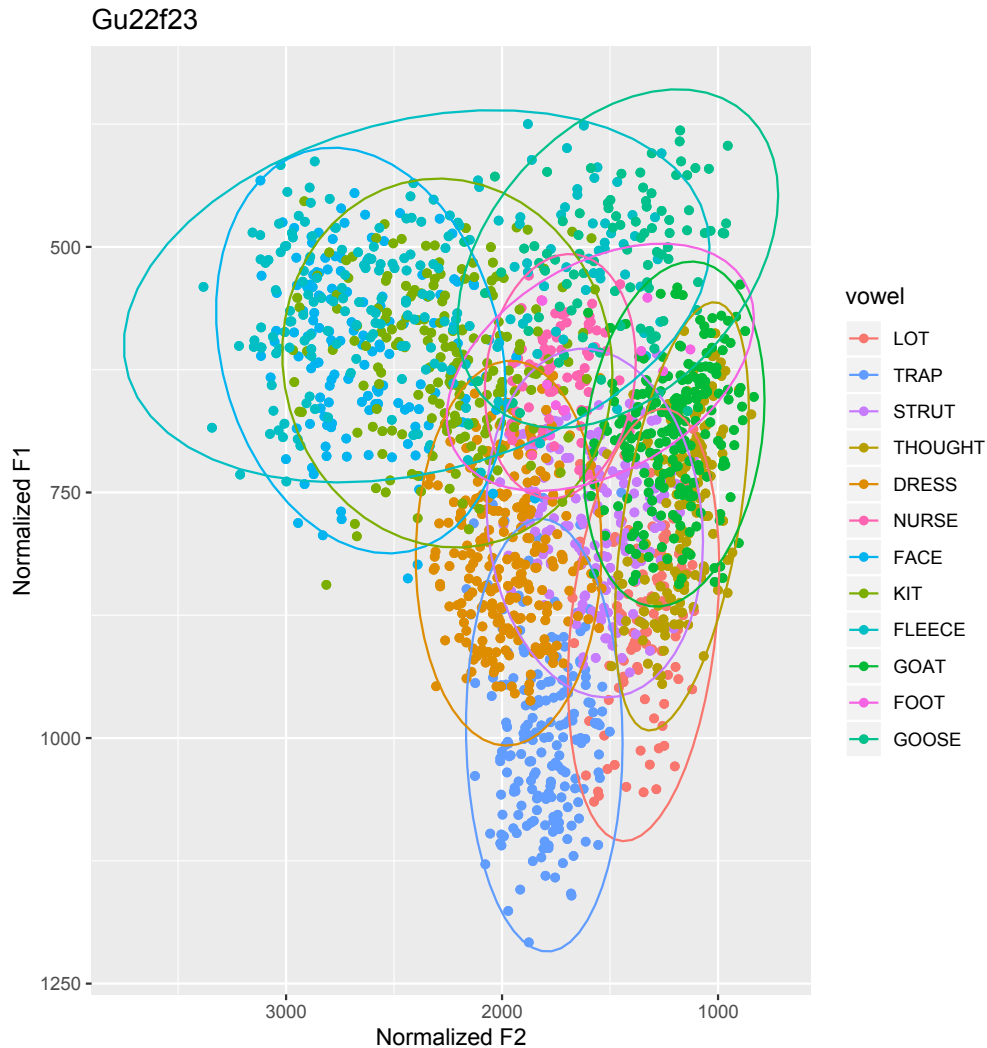


Figure 34 - Vowel space of a younger female Chamorro (speaker code: Gu22f23).

In this speaker (Gu22f23), we see the generational difference that sets this younger female Chamorro apart from her older counterpart (speaker code Gu44f91): KIT and FLEECE are overlapping to a lesser degree, though commentary on FLEECE in this speaker cannot be conclusive since she shows a comparatively large number of outliers in a high back position, which could hint at some measuring inaccuracies. Her DRESS vowel is partially overlapping with TRAP, indicating that she is producing it comparatively back. This impression is corroborated by the quantitative results presented in *Chapter 4 – Results: Part 2*. This speaker’s LOT and THOUGHT vowels are overlapping to a greater extent than what is seen in the older female Chamorro speaker. GOOSE is visibly in the upper, back corner of the vowel space, which is not indicating vowel fronting.

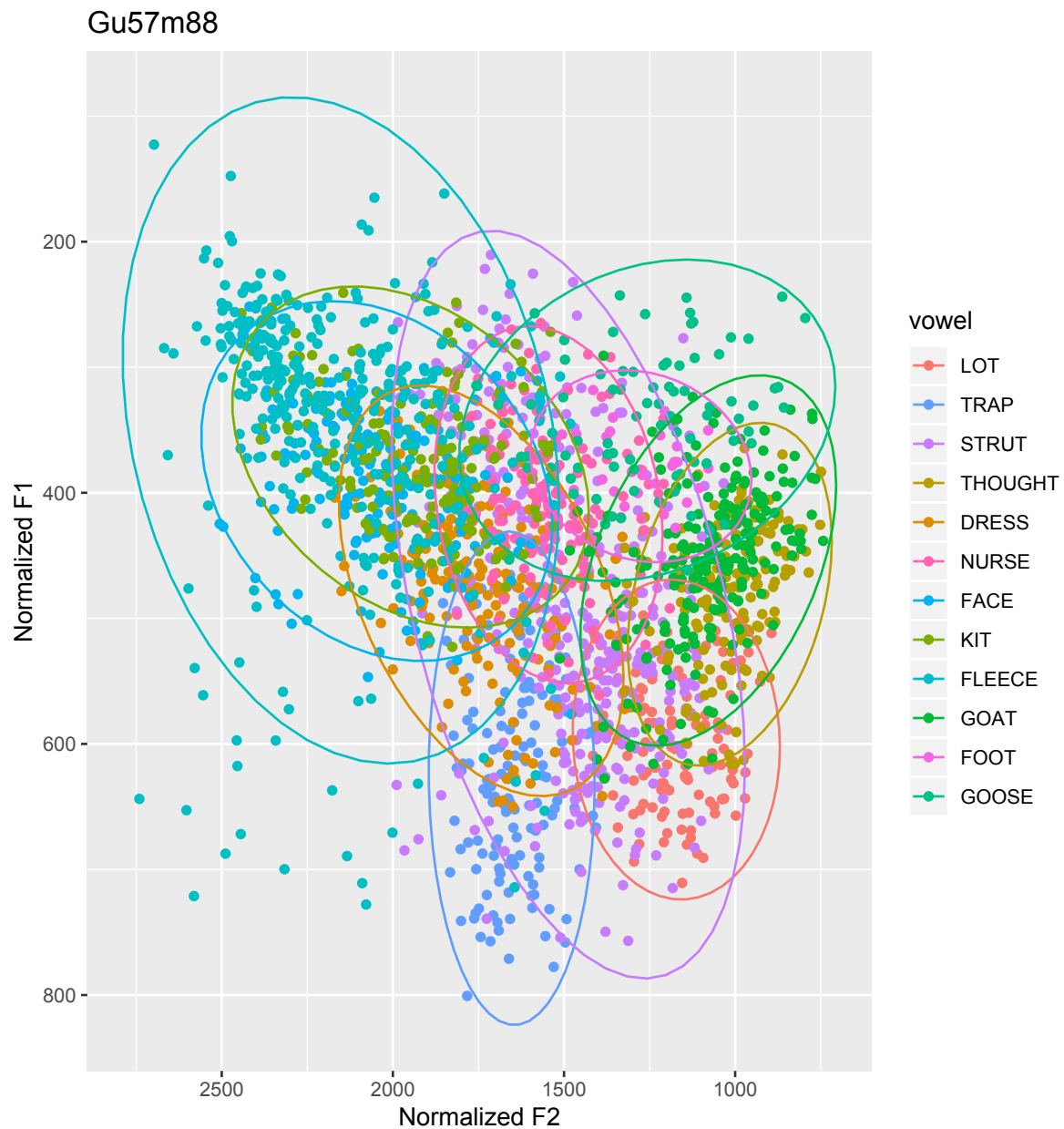


Figure 35 - Vowel space of an older male Chamorro (speaker code: Gu57m88).

Similar to the older female Chamorro speaker, we find a number of non-standard features in this older male speaker (Gu57m88). KIT and FLEECE are almost entirely overlapping, suggesting a raised KIT vowel. Noteworthy is also the rather limited overlap of LOT and THOUGHT, which indicates no merger of the two vowels. GOOSE is realized in a back position and shows no signs of fronting.

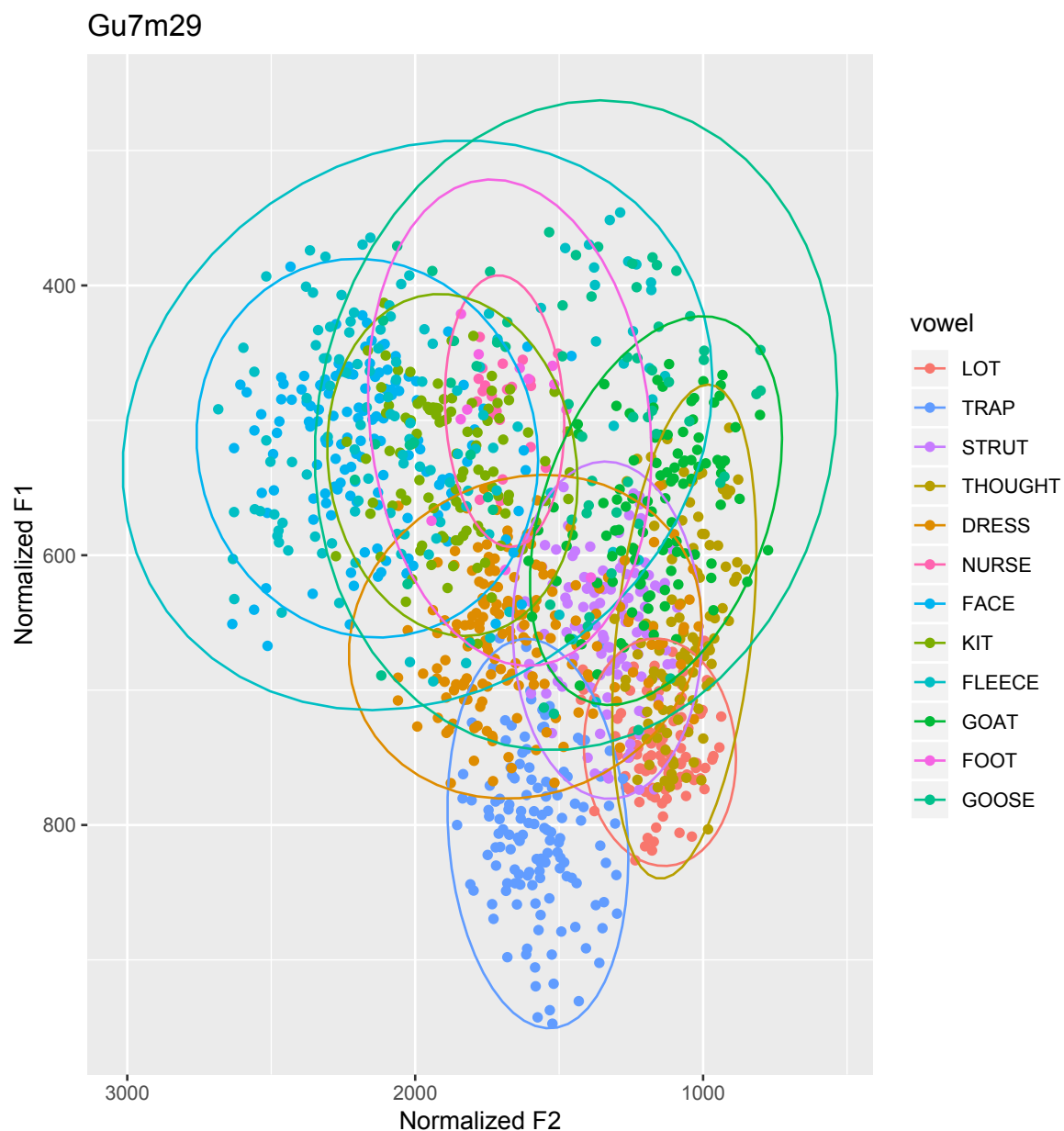


Figure 36 - Vowel space of a younger male Chamorro (speaker code: Gu7m29).

In this speaker (Gu7m29), we find a wide distribution of FLEECE and consequently many tokens overlapping with KIT. LOT and THOUGHT show more of an overlap than what is found in the older male and female Chamorro speakers. GOOSE also shows a large range, including some relatively fronted tokens.

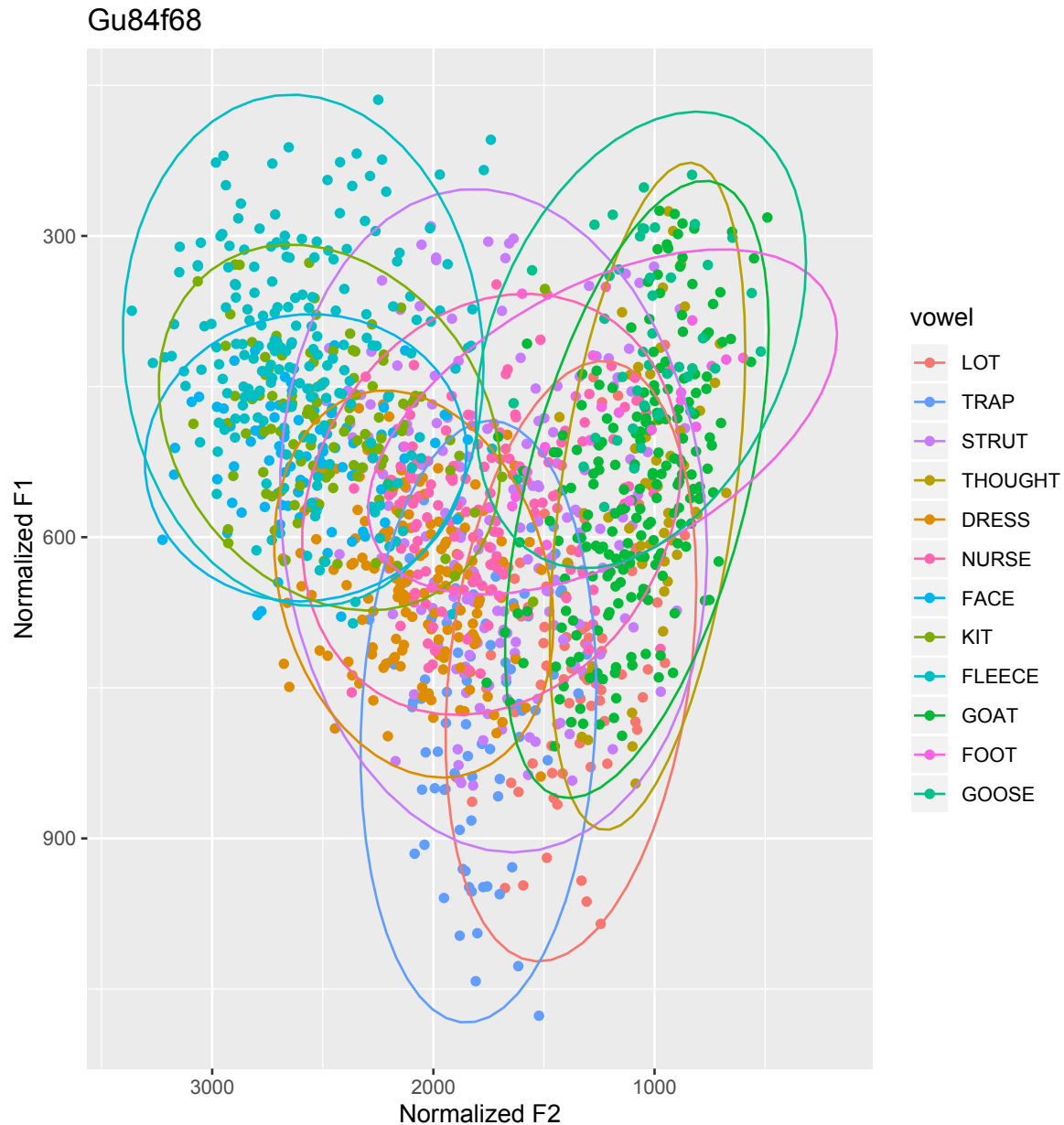


Figure 37 - Vowel space of an older female Filipino (speaker code: Gu84f68).

This speaker (Gu84f68) shows a relatively standard American English vowel distribution. We see overlapping but still distinguishable KIT and FLEECE vowels. LOT and THOUGHT are distinct but partially overlapping, and GOOSE is positioned high and back. Based on auditory analysis, the speaker shows several Philippine English substrate language influences, but that impression is perhaps not due to her vowel production, but rather due to other linguistic features, such as her intonation.

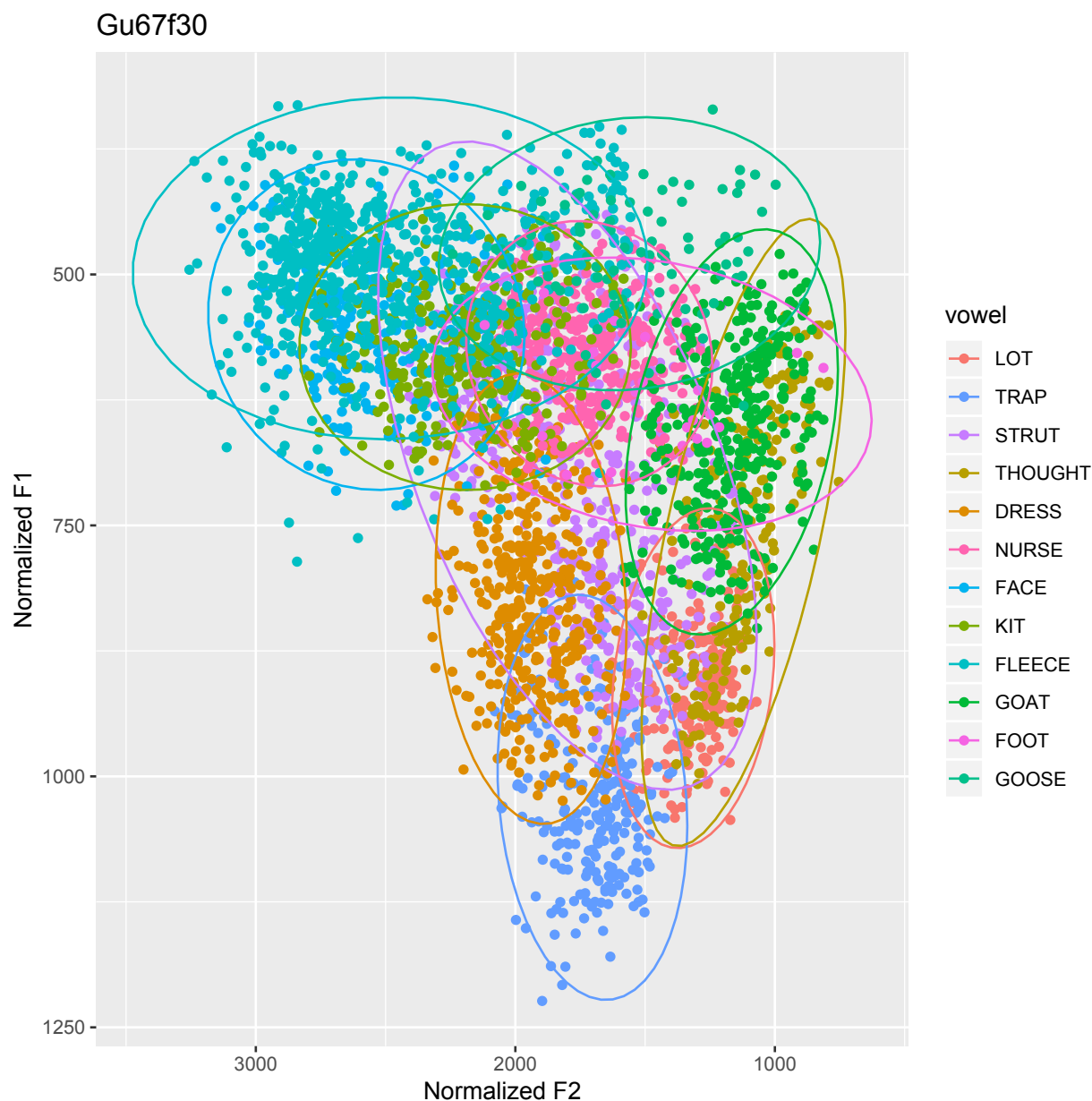


Figure 38 - Vowel space of a younger female Filipino (speaker code: Gu67f30).

In this speaker (Gu67f30), we find an overlap of LOT and THOUGHT, and slight fronting of GOOSE. Regarding her front vowels, TRAP and DRESS are positioned low and central, which is a feature that I noticed as especially salient when listening to this speaker. She was my yoga teacher during my stay in Guam, and I particularly remember her low and central pronunciation of DRESS in the word *exhale* ([aks'heil]). KIT is realized distinctly from FLEECE.

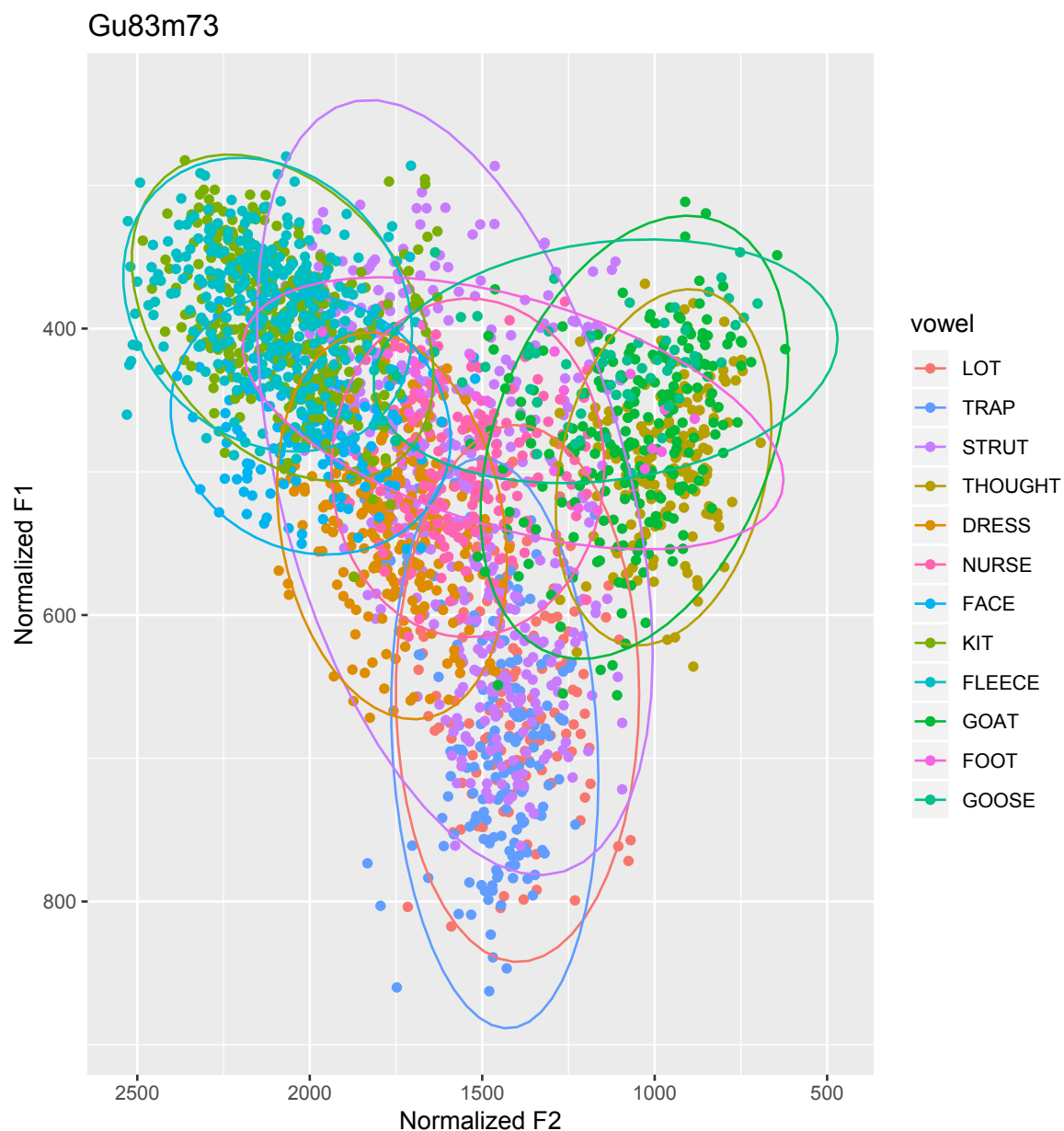


Figure 39 - Vowel space of an older male Filipino (speaker code: Gu83m73).

In this speaker's vowel production (Gu83m73), KIT and FLEECE are entirely overlapping, DRESS and LOT are almost completely overlapping and clearly distinguishable from THOUGHT, which, in turn, is overlapping with GOAT. These types of mergers are not typical of Guam English and clearly show a Philippine English influence. His FOOT and GOOSE vowels, however, *don't* show the complete merger reported for Philippine English (based on Gonzalez, 2003).

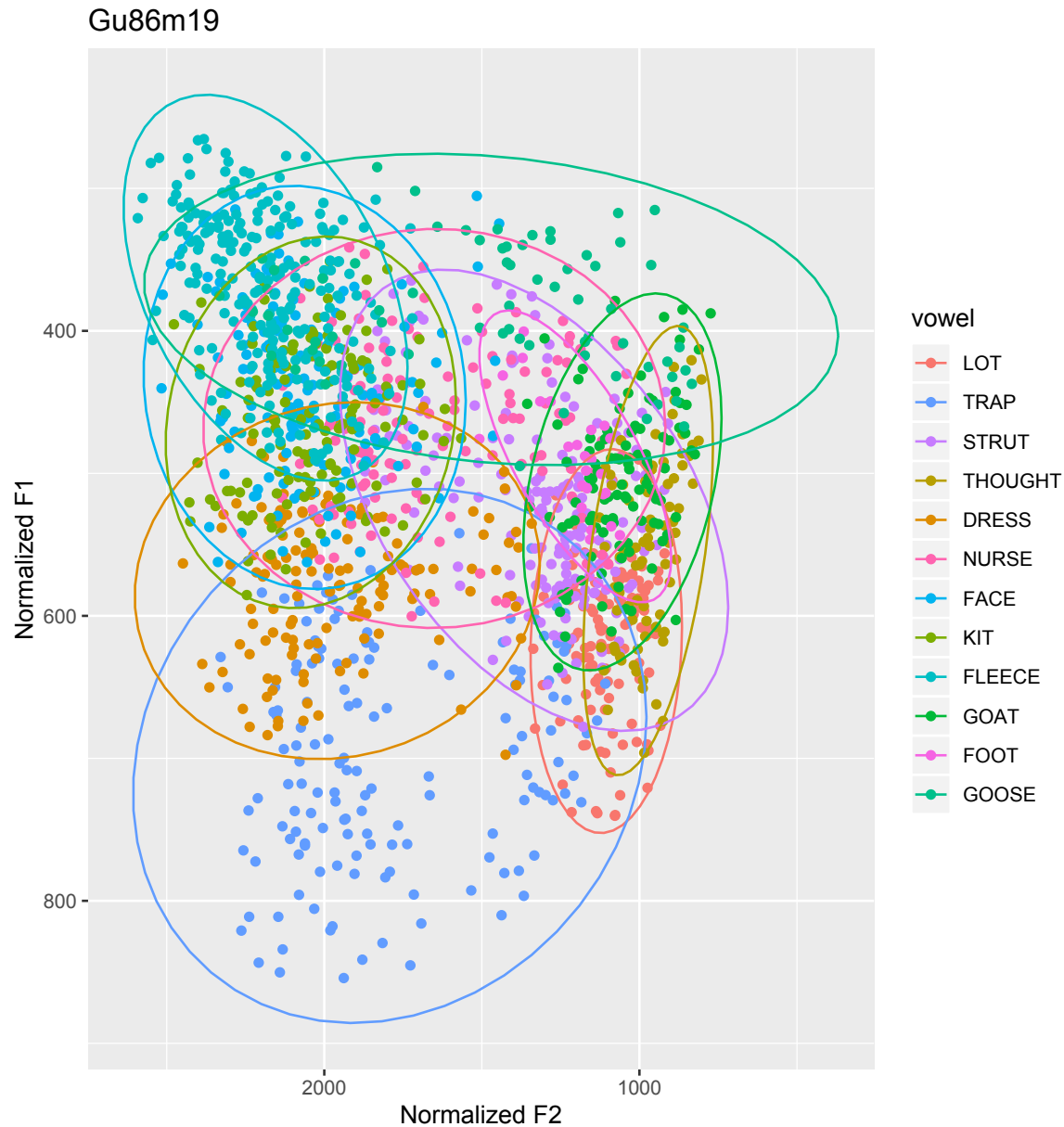


Figure 40 - Vowel space of a younger male Filipino (speaker code: Gu86m19).

This young Filipino speaker (Gu86m19), similar to his female counterpart, shows KIT and FLEECE as clearly distinguishable vowels, DRESS is positioned rather low, LOT and THOUGHT are to a large part overlapping and GOOSE is distributed from high back tokens to an equal amount of tokens that are fronted as far as FLEECE. TRAP shows two distinguishable clusters, a pattern that was not found in any of the previously discussed vowel plots. When taking a closer look at the phonetic constraints (see fig. 41), one can suspect a certain degree of pre-nasal fronting of TRAP.

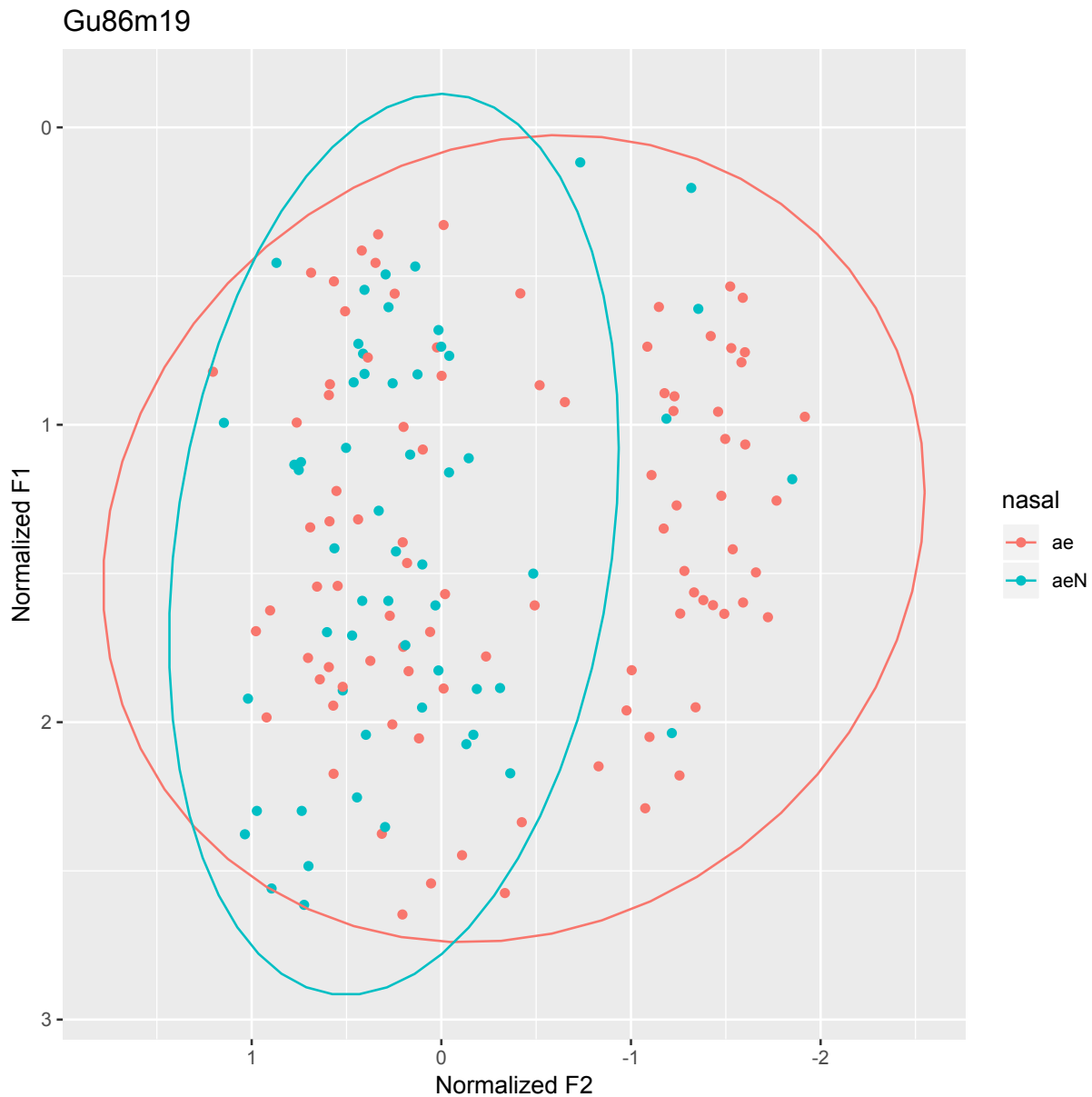


Figure 41 - Illustration of the vowel TRAP in pre-nasal and pre-oral environments in a younger Filipino speaker (speaker code: Gu86m19).

Fig 41 of the same speaker (Gu86m19) shows two distinguishable clusters of TRAP, which hints at a possible split due to phonetic constraints. A closer look shows that even though there is some overlap, pre-nasal TRAP is generally more fronted in comparison to the vowel production in all other phonetic environments. This pattern was not judged as particularly salient in the auditory analysis of this speaker. This speaker's vowel plots will be discussed in more detail in a case study (c.f. *Chapter 4 - Results, Part 3*).



Figure 42 - Vowel space of an older female Caucasian (speaker code: Gu79f71).

This older female Caucasian (Gu79f71) does not show many local features when it comes to her vowels, apart from a potentially rather low and back production of TRAP. KIT and FLEECE are distinguishable, and GOOSE appears to be scattered, with many fronted tokens. The lack of overlap in KIT and FLEECE shows that her speech is noticeably different from Chamorro speakers of the same, older age group.

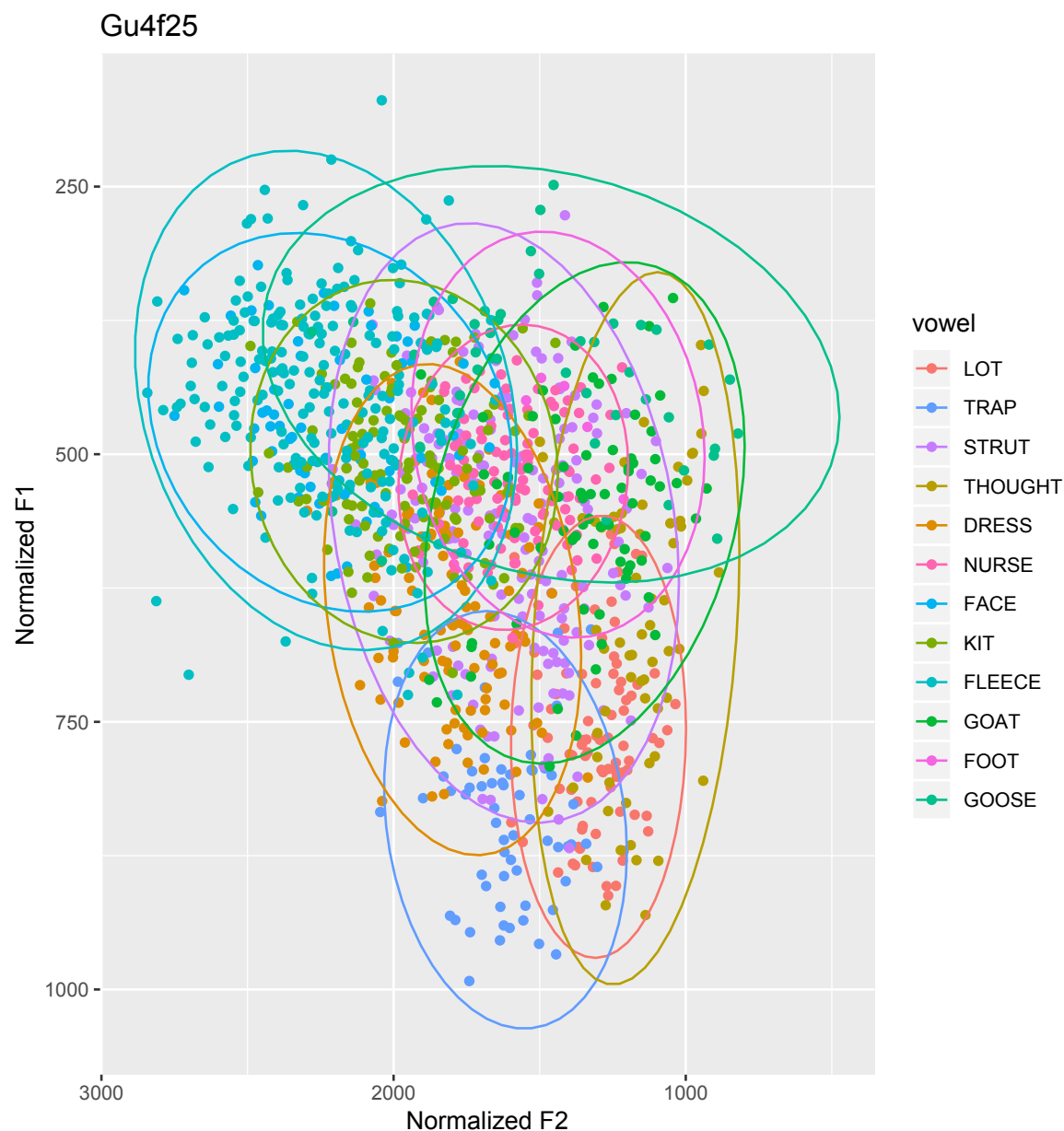


Figure 43 - Vowel space of a younger female Caucasian (speaker code: Gu4f25).

This young Caucasian female speaker (Gu4f25) shows some local features, such as a seeming overlap of KIT and FLEECE. In the auditory analysis, this feature did not appear salient to me and therefore needs to be interpreted tentatively. I did, however, notice a rather low and back production of TRAP in this speaker, which is visible in the vowel plot. LOT and THOUGHT are overlapping, and GOOSE shows some back and some front tokens.

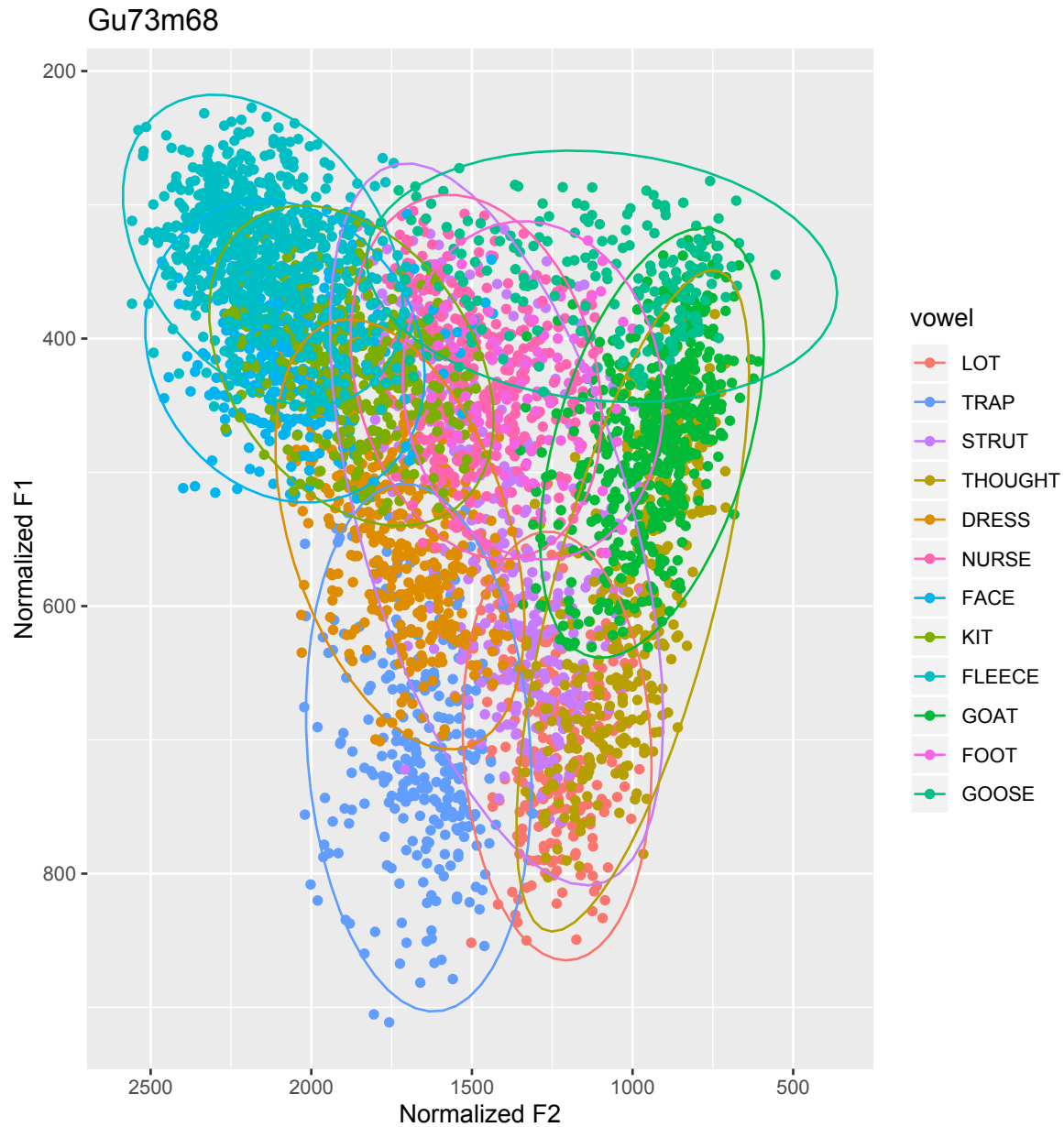


Figure 44 - Vowel space of an older male Caucasian (speaker code: Gu73m68).

This older Caucasian speaker (Gu73m68) does not show many of the local features found in his Chamorro counterparts: KIT and FLEECE are distinguishable, TRAP does not appear particularly back, which is not saliently visible in the plot, but was confirmed in the auditory analysis. GOOSE is realized high and back with a few fronted tokens. GOAT and LOT are equally partially overlapping with THOUGHT.

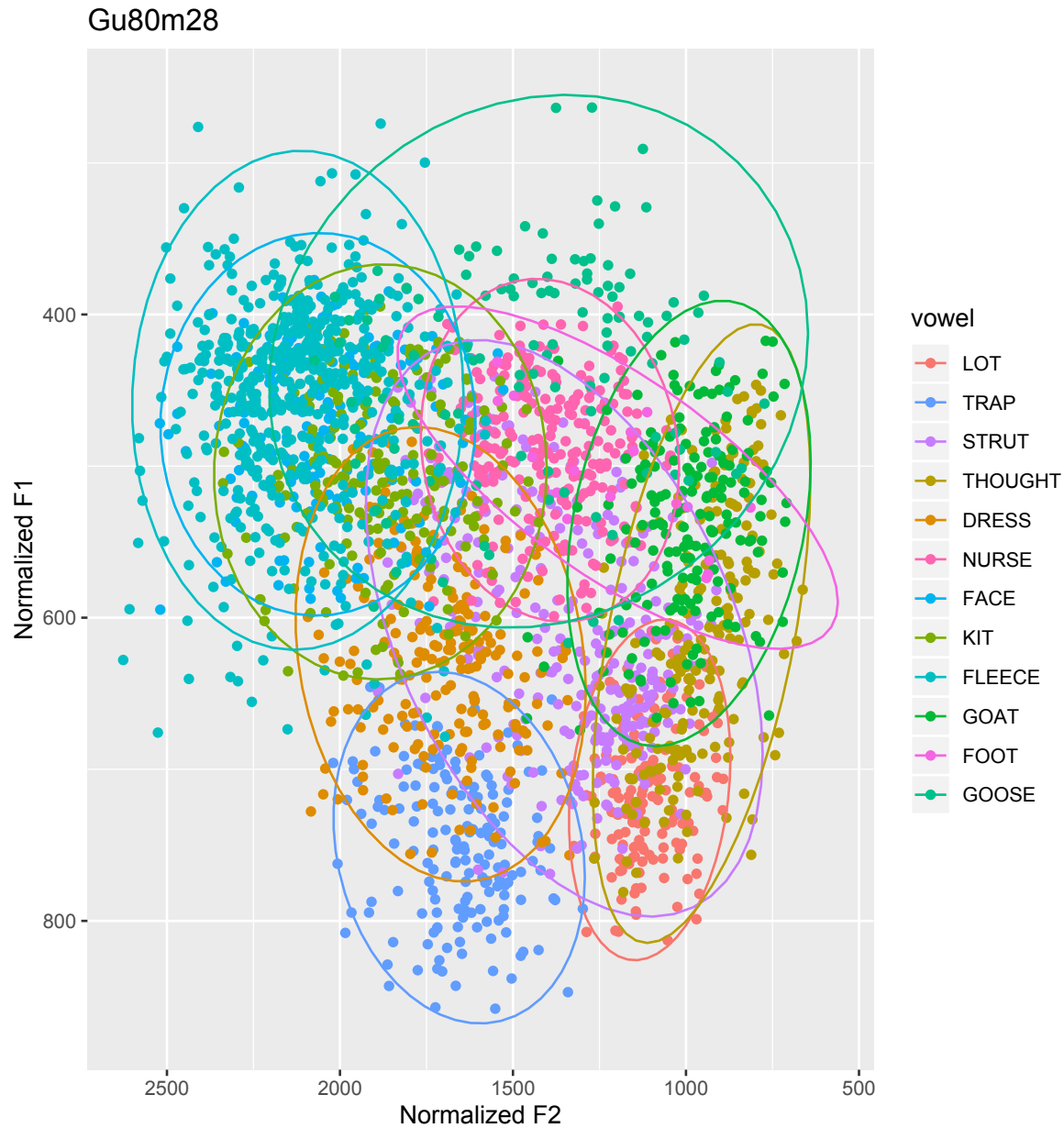


Figure 45 - Vowel space of a younger male Caucasian (speaker code: Gu80m28).

This young Caucasian male speaker (Gu80m28) shows an overlap of KIT and FLEECE, though that is not particularly salient in the auditory analysis. His TRAP vowel is not particularly backed, but auditory analysis suggests that he also does not raise the vowel, including pre-nasal environments. GOOSE is widely distributed with both backed and fronted tokens. His vowel production will be discussed in more detail in a case study (c.f. *Chapter 4 – Results, Part 3*).

5.1.1.2 Consonants

5.1.1.2.1 Stops

/p, t, k/ /p/ and /t/ and /k/ are often unaspirated in word initial and medial positions (*time* [təɪm], *take* [teɪk], *cemetery* [semətɛɪ], *prison* [pɹɪsən/ pɹɪsqn], *passed* [pæst], *clean* [klin]). /p/, /t/ and /k/ are also reported to be less aspirated in Chamorro (Topping, 1969) and in Philippine English (Tayao, 2008), which may have been an influential factor on the English pronunciation (c.f. *Discussion and Conclusion*). /t/ is, but only occasionally, voiced in Chamorro and Guam Filipino speakers (*belt* [beld]). /t/ is often flapped ([ɾ]) inter-vocally before an unstressed vowel (*better* [bɛɾɛɪ]). Finally, /t/ can also be glottalized in word final positions in all three ethnic groups (*it* [ɪʔ], *not* [nʌʔ]). It is less frequently glottalized or deleted in word-medial positions (*mountain* [maʊntən], *cotton* [kʌtn], *center* [sɛntɛɪ]). This is a feature that speakers are aware of and a few younger participants even commented on it during the interview. Some remarked that they had been told about their “weird t’s” on trips to the U.S. One participant even said that he glottalizes /t/ on purpose to sound more American, i.e. more standard/professional:

Well, for me, it’s funny, I’m actually adapting. If I’m at- if I’m in a work setting, I’ll say, you know, I’ll say curtain [ˈkɜɾʔən] but if I’m at home with my family, I’ll say curtain [ˈkɜrtən], you know. (Male Chamorro, Gu70m27, born around 1990)

The fact that this speaker associates t-glottalization with the mainland U.S. is somewhat surprising, as this feature is widespread and can be found in Englishes across the globe. While it was initially stigmatized as a feature of lower prestige, for instance in many British English varieties (c.f. Trudgill, 1974; Macaulay, 1977; Milroy, Milroy, and Walshaw, 1994), it now occurs frequently across the board, including higher social classes. In the U.S., t-glottalization is most common in young female speakers of Western states (e.g. California) (c.f. Partin-Hernandez, 2005, reported in Eddington and Taylor, 2009; Eddington and Taylor, 2009).

/k/ is, but only occasionally, uvularized in older speakers with Chamorro as a mother tongue (*coming* [qʌmɪŋ]). This feature is also reported in other Micronesian Englishes, such as Palauan English (Britain and Matsumoto, forthcoming).

/b, d, g/ Though generally produced as [b], [d], and [g], voiced consonants /b/, /d/ and /g/ are occasionally devoiced by older speakers in word-final positions (*bad* [bat], *bag* [bak], *kids* [kɪts]). This may be due to substrate language influence. Chamorro, for instance, does not have voiced sounds in word-final positions (Quan, 2010, p. 13). In Santos et al. (1992), examples of consonant devoicing are used in a widely-read comic that humorously displays the local Chamorro English variety, for example in the expression “*bolt* as an egg”.

5.1.1.2.2 Fricatives

/f, v/ Though generally produced as [f], [v], /v/ is occasionally devoiced (*move* [muf], *service* [səˈfɪs], *consecutive* [kənˈsekjətɪf]). Gaynell Pool Layne (1970, p. 104) reports a similar finding, phrasing it as: “/f/ and /v/ are often confused in all positions (leaf:leave, fine:vine).” In Chamorro, only the voiceless fricative [f] is reported, while [v] is not part of the Chamorro sound system. In Spanish loan words that include the letter “v” in the original spelling, the letter is frequently substitute with “b” (e.g. “unibetsedat”, deriving from Spanish “universidad”). In older Filipino speakers in Guam, I noted a frequent substitution of [f, v] with [p, b], which is likely due to substrate language influence. This substitution is also reported in Philippine English (Lourdes and Tayao, 2008).

/θ, ð/ Both features are variable. /ð/ is occasionally substituted with [d] (*the* [də], *there* [dɛɪ]); /θ/ is occasionally substituted with [f], primarily in word final positions (*underneath* [ʌndəˌniːf]) and substituted with [t] in a word initial position (*thirty* [təˈdɪ], *thing* [tɪŋ], *three* [ti]). Neither [θ] nor [ð] occur in Chamorro and they are reported as being frequently replaced with [t] and [d] in Philippine English (Tayao, 2008).

/s, z/ /s/ is generally produced as [s], but occasionally also as [ʃ] or [tʃ] (*principle* [pɹɪntʃɪpəl], *first* [fɜɹʃt], *understand* [ˌʌndərˈʃtænd]). /z/ is generally produced as [z], but occasionally as [ʒ] or [dʒ] (*zip lock* [dʒɪplʌk]). Word-finally, /z/ is occasionally devoiced (*buzz* [bʌs]). This may be a feature that has been influenced by Chamorro, where voiced final consonants do not occur. Locals are often aware of this feature and associate it with older, mainly Chamorro speakers. It is one that is portrayed in a humorous way in “English the Chamoru Way” (Santos et al., 1992).

/ʃ, ʒ/ /ʃ/ is generally produced as [ʃ], but occasionally also as [s] (*fish* [fis]). /ʒ/ is produced as [ʒ] but also as [s] word-finally or [dz] word-initially (*jazz* [dʒas]; *zipper* [dzɪppər]), which is also reported in Quan (2010). Both /ʃ/ and /ʒ/ do not occur in Chamorro.

/h/ The production of /h/ resembles General American English ([h]). Gaynell Pool Layne (1970, p. 104) reports that “/h/ in initial position is used interchangeably with the use of the initial vowel [sic.] sound as though the /h/ weren’t there (hat:at; ill:hill) [sic.]”. This feature, assumingly describing h-deletion, was not found in the data presented here.

5.1.1.2.3 Affricates

/tʃ/ This feature is generally produced as [tʃ]. In older Chamorro speakers, it is variable and interchangeably produced in a more alveolarized position, [ts] (*chance* [tsans], *charge* [tsʌrts]), which is also found by Quan (2010). In Chamorro, only the affricate [ts] and not [tʃ] is reported (Topping, 1969).

/dʒ/ This feature is generally produced as [dʒ], but is occasionally devoiced /tʃ/ (*language* [ˈlæŋgwətʃ]). In older Chamorro speakers, it can be variable and interchangeably produced in a more alveolarized way [dz]. In Chamorro, only the affricate [dz] and not [dʒ] is reported (Topping, 1973).

5.1.1.2.4 *Nasals*

/m, n, ŋ/ The production of /m/, /n/ and /ŋ/ resembles General American English ([m], [n], [ŋ]). /ŋ/ is occasionally realized as /n/ in <-ing> forms (*Washington* [wɑʃɪntɒn]). Gaynell Pool Layne (1970) reports dropping of /m/ and /n/ in final positions, which was not confirmed in this dataset.

5.1.1.2.5 *Lateral*

/l/ /l/ is frequently vocalized (*old* [oʊd], *shoulder* [ʃoʊdər]), a feature that I noticed in Chamorro and Filipino speakers of all age groups. /l/ also tends to be produced in a relatively light manner where Standard American English would prefer a dark production. This feature, I noted, for instance, in word-initial and inter-vocalic positions (*light* [laɪt], *killing* ['kɪlɪŋ]). Gaynell Pool Layne (1970) reports a substitution of /l/ with /n/, which was not confirmed in this dataset.

5.1.1.2.6 *Retroflex Liquid*

/ɾ/ Guam English is rhotic and /r/ is realized as [ɾ] in stressed as well as unstressed syllables across all generations (*hard* [hʌɪd]). In older speakers [ɾ] is, but only rarely, deleted (*forgot* [fə'gɑt]) or vocalized (*growing up* ['gʁoʊɪŋ ʌp]). Gaynell Pool Layne (1970) reports r-trilling and r-omitting in her findings. R-trilling was found only in some older Filipino speakers that still had considerable ties to the Philippines.

5.1.1.2.7 *Glides*

[w, j] The production of /w/ and /j/ resembles General American English ([w], [j]). Deletion after coronels, a feature that is common in U.S. regional Englishes, occasionally occurs in Guam English (*attitude* ['atə,tud]).

5.1.1.2.8 *Consonant Clusters*

Consonant cluster reduction occurs frequently in older Chamorro speakers (*task* [tas], *first* [fɪs]). This may be due to the Chamorro basic CV(C) structure (Quan, 2010, p. 14). Vowels are frequently inserted in word-medial consonant clusters (*evening* ['ivənɪŋ], *chocolate* ['ʃəkələt]). Gaynell Pool

Layne (1970) similarly states that L1 Chamorro speakers of English have difficulty producing syllabic consonants, such as “/tl/ (bottle), /tn/ (mountain), /dl/ (saddle), /dn/ (hidden), /nl/ (tunnel)” (p. 105). She states that these syllabic consonants are often realized with an inserted vowel.

5.1.2 Prosody

Prosody appears to be one of the most salient features of Guam English. When imitating the dialect to showcase in an exaggerated way what a typical Guam English speaker sounds like, locals often focus specifically on word stress and intonation. This way, they mainly reproduce the prosody of older and basilectal speakers. A syllable-timed intonation pattern is frequent, particularly in older speakers. Those speakers rarely reduce function words such as *to*, which is pronounced as [tʊ] and only rarely as [tə] or [də], and *of*, which is [ʌv] and only rarely as [əf], [əv] or [ə]. Many of the locals, in particular younger speakers, however, show stress-timed prosody and vowel reduction in function words in appropriate contexts. For example, *don't* is reduced to [dən], *because* is reduced to [kəz], *for* is reduced to [fər], *to* is reduced to [tə] or [də]. Grammaticalized verbal forms also frequently occur, such as *gonna* or *wanna*. The substrate languages, Chamorro and several Philippine languages, are syllable-timed, along with many other languages of South and Southeast Asia (c.f. Lowenberg, 1986; Tay, 1982; Llamazon, 1969). In younger speakers I have noted occasional up-talk resembling American English sociolects (e.g. California English, Eckert, 2008).

A variety of words are consistently pronounced with a stress pattern different from General American English. *ID card* ([ˈaɪdi kɑːd]), for instance, is stressed on the first syllable by many Guam English speakers, regardless of their age or time spent off-island. Other examples are: *understand* ([ˈʌndərstand]), *eligible* ([ɛˈlɪdʒəbəl]) or *relocated* ([rɪlooˈkeɪtəd])⁴². In some instances, Chamorro may be influential on this alternative stress pattern, as words are generally stressed on the penultimate syllable in the substrate language (Topping, 1973). Alternative stress patterns are also found on a phrasal level, where the penultimate syllable rule does not seem to apply (*pass away* [ˈpasəweɪ], *high blood pressure* [haɪblʌdˈpreʃər]).

Generally, speakers of Guam English show a limited amount of cross-word assimilation and instead tend to pronounce each word separately. “*Didn't want to*” is *not* reduced to [dɪdnwʌnə],

⁴² In General American English, these example words would more likely be stressed as follows: *ID card* [aɪˈdi kɑːd], *understand* [ʌndərˈstand], *eligible* ([ˈɛlɪdʒəbəl]) or *relocated* ([rɪˈlooːkɛrtəd])

“but you” is not connected with yod-coalescence to [bʌdʒju:]. Gaynell Pool Layne (1970, p. 105) also reports in her findings that L1 Chamorro speakers of English have difficulty producing “run-on words [that require] the production of the sounds /s/ (is this your book?), /z/ (Did it please you?), and /c/ (Does it fit you?)”. Cross-word assimilation appears to be more frequent in more acriclectal speakers of Guam English.

Hiatus resolution in intervocalic environments across word boundaries are usually produced by leaving vowel combinations intact, or with a (weak) glottal stop [ʔ] (*stay in* [steɪ ɪn]). Most often, there is a short break between the first word ending in a vowel and the following word beginning in a vowel. A homorganic glide is occasionally inserted after a high-front vowel (*my other* [maɪjoðə], *every year* [ɛvərijə]). There occasionally is a glide inserted after high back vowels (*go out* [gouwaʊt]). Unlike General American English, Guam English speakers often lack allomorphy in the definite article: they only rarely raise the final vowel of *the* to a FLEECE vowel before a following word starting in a vowel (*the elder* is produced as [ðə ɛldər] as opposed to [ði ɛldər]).

5.1.3 Morphology-Syntax

Guam English generally follows American English morpho-syntax. Patterns diverging greatly from General American English are mostly found in older speakers, predominantly, but not exclusively, speakers that grew up speaking Chamorro or a Filipino language as a first language. Younger, more provincial speakers may show similar patterns. The following list of morpho-syntactical features is organized according to the categories provided by the electronic World Atlas of Varieties of English (eWAVE) questionnaire (Kortmann and Lukenheimer, 2013). The discussion is limited to salient features found in Guam English, or those that indicate an assimilation to American English.

5.1.3.1 Pronouns, Pronoun Exchange, Nominal Gender

For the third person singular pronoun, the masculine and feminine forms are frequently interchanged in older speakers. This may be due to the Chamorro language influence, where there is no gender distinction in the third person singular pronouns (Topping, 1973, pp. 106-112).

Example 1: “*He* get off at four, *he* goes to school in the afternoon, *he* get off at four *she* called me up at the house.”

Example 2: “And *she- he* was a girl.”

Example 3: “One time this Filipino, *her- his* wife is a nurse and *he- she* passed away.”

Emphatic reflexives with “own” are used occasionally, particularly in L1 Chamorro speakers. In Chamorro, the possessive pronouns are attached to the preceding word (ka’reta [ka.ɾeta] (*car*) kare’ta-hu [ka.ɾeta.hu] (*my (own) car*)). Younger Chamorros are employing this feature frequently when emphasizing their localness, particularly in conversation with more basilectal, Chamorro Guam English speakers.

Example 4: “I just got *my own* nails did.”

Example 5: “I just hit *my own* head.”

Example 6: “Is that *your own* car?”

The first-person plural (we) is occasionally replaced by “us guys”. Chamorro distinguishes between an inclusive and an exclusive first-person plural (Topping, 1973, pp. 106-107). For the second person plural (you), “you guys” is occasionally used as an alternative to *you*, which is also common in General American English.

Example 7: “*Us guys* are going to the fight tonight.”

Example 8: “Are *you guys* going out?”

Example 9: “Do *you guys* have KFC over there?”

5.1.3.2 Noun Phrase

Marking of plurality occasionally differs from standard varieties. Plural marking is, for instance, occasionally absent after quantifiers (example 10). Count or mass nouns are occasionally marked as plural where a standard English variety would mark them as singular or vice versa (examples

11, 12). When referring to the degree of kinship, the singular noun form may be used (examples 13, 14, 15)⁴³.

Example 10: “One of my *niece*.”

Example 11: “I take care of all those *mails*.”

Example 12: “To return the *mails*, all those misroute mail, they send it to me.”

Example 13: “His mom and my mom are *sister*.”

Example 14: “Her husband and I are first *cousin*.”

Example 15: “I have twenty *gran*.”

There is occasional use of a zero article where standard English varieties employ an indefinite or definite article (examples 16, 17, 18) and there is use of a definite or indefinite article where standard English varieties favor no article (examples 19, 20, 21)⁴⁴.

Example 16: “I was Ø spoiled brat.”

Example 17: “He’s Ø really nice guy.”

Example 18: “Two of them decided to go to Ø Philippines.”

Example 19: “When it’s a rainy day, he will have *a* joint pain.”

Example 20: “When it’s *a* dry season, he plant corn, when it’s *a* rainy season, he plant rice.”

Example 21: “We have *a* rice, fresh rice.”

⁴³ c.f. section 3.8.2 - The Chamorro Language: Alternative forms of pluralization in Guam English may be due to substrate language influence. In Chamorro, there is a distinction between non-plurality and plurality. Plural nouns are marked with the prefix *man-* and in some cases by adding the word *siha* following the noun. The latter form is frequently omitted. For verbs, plurality is marked differently when referring to two people as opposed to more than two people (Topping, 1973, p. 232).

⁴⁴ c.f. section 3.8.2 - The Chamorro Language: Chamorro distinguishes between *common articles* and *proper articles*. Proper articles are used preceding a person’s proper name (*si* Maria). Comparison to English may be difficult as “in many cases the use of Chamorro articles is unique to Chamorro” (Topping, 1973, p. 130). This may also mean that the alternative use of articles in Guam English was not necessarily affected by substrate language influence, as the two systems are reportedly so different.

5.1.3.3 Verb Phrase I: Tense and Aspect

Various past formations distinct from standard English occur frequently in some speakers, particularly in the older generations, but may be absent in others. They may also occur in younger basilectal speakers as will be discussed in *Chapter 4 – Results, Part 3*.

The past in a habitual context (referred to as “continuative or experiential perfect” in eWave) is occasionally uttered in present simple or present continuous and interchangeably used with the past tense.

Example 22: “We *say* a bad word you *get* a spoon full of pepper and *chew* it.” (Speaker is referring to his childhood punishments)

Example 23: “Before the war, we *live* in Agana.”

In a non-habitual context, past tense marking may also be absent or is only denoted in a clause or temporal adverb, but not marked in the verb:

Example 24: “When my mother *die*, I take care of all my sisters and brother.”

Example 25: “I *stay* here and I *go* to Florida.” (Speaker reporting on her past mobility)

Example 26: “That's when I *retire* in two thousand seven.”

Example 27: “She *has* kids already when she was still single.”

Example 28: “She never *did ask* me.”⁴⁵

Example 29: “When *I'm working* for [] *I'm putting* on the guy's rims on his SUV, his twenty-twos, the car *slipped* off the jack and my hand *got wedged* underneath the- the fender and the tire.” (Speaker recollecting his accident using present continuous for a longer action in the past and past simple for the shorter action)

⁴⁵ This phrasing can be used to show emphasis in standard English, but that was unlikely the case in this context.

The present perfect is formed variably. It may be unmarked in the verb and only denoted in the adjacent clause (example 30), the auxiliary verb may be absent (example 31) or the past simple verb form may be used for the past participle (example 32).

Example 30: “My husband *die* already thirty-three years”

Example 31: “I *been* there for six years.”

Example 32: “Have you *spoke* to [] yet?”

The past may be reported in present tense, but actions happening closer to the present are marked with the future tense⁴⁶:

Example 33: “When I come home, this lady *will* go home.” (speaker telling a story from her childhood)

Example 34: “When it’s time to harvest the rice, my father *will* bring the rice home.” (speaker recollecting memories of her late father)

5.1.3.4 Negation

Double negation occurs occasionally in all age groups and ethnic groups (examples 35 and 36)⁴⁷.

Example 35: “I *don’t* want *nobody* to tell me.”

Example 36: “But if [the parents] just sit and *not* do *nothing*.”

⁴⁶ c.f. section 3.8.2 - The Chamorro Language: Chamorro only distinguishes between future tense and non-future tense. The future tense is marked in the verb or by use of structure words, whereas past and present tense are both unmarked. The future tense is also marked when both actions occur in the past, but one is more in the future relative to the other (Topping, Chamorro Reference Grammar, 1973, pp. 261-264).

⁴⁷ Topping (1973, p. 266) also reports a possible double negation that forms a positive in Chamorro (*tatnai ti*).

5.1.3.5 Agreement

Subject-verb agreement is occasionally non-standard: presentational *there's/there is/there was* with plural subjects may occur (example 38) and singular third person –s is occasionally not marked⁴⁸.

Example 37: “Two of them *is* in Chicago.”

Example 38: “There *was* all the Visayans.”

Example 39: “She stays home and *watch* the little ones.”

Example 40: “My second son *speak* little bit Chamorro.”

Example 41: “She *ask* me whether I’m Chamorro.”

Example 42: “He get off at five.”

5.1.3.6 Adverbs and Prepositions

The use of prepositions is occasionally, but rarely, omitted where Standard English would prefer it, or included where Standard English would omit it⁴⁹:

Example 43: “We have kids that will want to go Ø college.”

Example 44: “I didn’t go Ø college.”

Example 45: “I went public school from elementary all the way to high school.”

Example 46: “Let’s move *to* there.”

⁴⁸ c.f. section 3.8.2 - The Chamorro Language: Chamorro does not have a distinct inflection for the third person singular (Topping, 1973).

⁴⁹ c.f. section 3.8.2 - The Chamorro Language: Chamorro has several prepositions that refer to place, the most commonly used being *gi* ([gi]). While *gi* covers the use of a variety of English prepositions, there are some that are being used more specifically, such as *giya* ([gidʒæ]), which is used for place names (eg. Guam, San Francisco) and *para* which, among other meanings, can be translated into the English *to* (Humanao yu’ *para* i eskuela (I went to school)) (Topping, 1973).

5.1.3.7 Discourse Organization and Word Order

Occasionally, alternative word order occurs in questions, e.g. a subject-auxiliary inversion in embedded questions (example 47, 48), and the auxiliary verb may be omitted (examples 49, 50).

Example 47: “*You know what’s* a beef jerky?”

Example 48: “I wanted to ask how can I cancel my box.”

Example 49: “The butcher asked: ‘How Ø you guys eat the beef jerky?’”

Example 50: “How Ø you like Guam?”

Discourse markers *nay* ([nei]) (see examples 51, 52, 53, 54) and *fan* ([fan]) (examples 55, 56) are used frequently. The former is used across all age groups, whereas the latter is more common in older speakers. *Nay* can be used as an alternative to the question tag *right?* Its use may be most similar to Canadian *eh*, though it has variable meanings depending on the context and it is unclear what the marker derives from. *Fan* is used as a prefix in Chamorro to mark a sentence as imperative (Topping, 1973). For example, *taitai* (“to read”) turns into an imperative when adding the prefix *fan*: *fanaitai* (“read!”) (Topping, 1969, p. 207)⁵⁰. In Guam English, *fan* is can also be used to mark a sentence as imperative, but it is not used as a prefix and rather as a discourse marker. Its use is especially associated with older Chamorro speakers and has become a feature that the speakers are consciously aware of. I have only observed this feature in situations where the speakers were performing localness or Chamorro cultural belonging.

Example 51: “Depends, *nay*, if you move.”

Example 52: “Three strikes, *nay*, and you’re out.”

Example 53: “We asked the butcher to cut it for us, *nay*, to slice it.”

Example 54: “Out in the sun, *nay*, you know.”

Example 55: “Buy me *fan* coke!” (Santos, et al., 1992)

Example 56: “*Fan*, go get me a fan, *fan*!”

⁵⁰ The use of the prefix *fan* is only one of several ways to form the imperative in Chamorro. Other forms are not discussed here, as they are not connected with the use of discourse markers in English.

Younger speakers frequently use comparative *like* as well as *you know* as discourse markers.

Example 57: “I had that whole mindset, *like*, *you know*, I’m only hearing this in the class- in my Chamorro class.”

Example 58: “*You know*, *like*, hearing him talking to his dad.”

Example 59: “I’m trying to do, *like*, teach myself outside of school.”

5.1.4 Lexis

Lexical borrowings from other languages are used regularly in Guam English. Chamorro lexis is particularly common in the context of family relations, street names, food and common greetings. Some of the words have a Spanish root or are directly borrowed from Spanish. A few terms deriving from languages other than English and Chamorro are also used frequently, for instance lexical items borrowed from Japanese or Philippine languages. Finally, some English terms and phrases are used distinctly from General American English.

Family relations

Che’lu ([tseʔlu], often [tʃelu] when speaking English), Chamorro for “sibling”, “brother” or “sister” (Pereda, 2015). It is considered a non-insulting affiliative address term, comparable, but not identical to, *bro* or *dude* in vernacular American Englishes.

Example: “I’m not gonna waste my money to go watch a *che’lu* fight.”

Par (also *Pari*) ([pʌɪ], [pʌɪʔ]), from the Chamorro word *Kumpaire* (borrowed from Spanish *compadre* (“godfather”)) was originally used “to describe the relationship between parents and their child’s godfather” (Salas, 2014). Nowadays it is used similar to *bro* or *dude* in vernacular American English.

Example: “Say, *Par*, give me a ride after here, eh.”

Neni ([nenɪ]) is the Chamorro term for “baby”, commonly used by elders to address younger interlocutors, even if they are already grown up. Example: “*Neni*, go help her out!”

Man'Amko ([man'amko]) is the Chamorro term for elders.

Food and Edibles

Lemmai ([lemai]) is the indigenous term for breadfruit, which grows on the island and is frequently used to cook traditional Chamorro dishes.

Pugua ([pugua]) is the Chamorro term referring to the areca nut, also called *betel nut*, a fruit chewed for recreational purposes.

Kådun Månuk,
Kelaguen,

Beef Tinaktak Frequently cooked dishes, particularly for community parties (*fiestas*).

Town, villages and street names

Hagåtña Guam’s capitol. The English equivalent, *Agana*, is also used frequently, though the village has officially been renamed to its original, indigenous name.

Malessó' A village in the Southern part of the island. The English equivalent, *Merizo* is also used frequently.

Street names are frequently named after historic figures (*San Vitores Rd, Magellan Ave*), they incorporate Chamorro, Spanish or English terms (*Trankilo Street, Soledad Drive, Marine Corps Drive, First Street*) or are preceded by the term *Chalan*, meaning street or road in Chamorro (*Chalan Joseph A. Cruz, Chalan Sabana*).

Common forms of greeting

<i>Hafa Adai</i>	Common Chamorro greeting
<i>Buenas</i>	Common Chamorro greeting, borrowed from Spanish
<i>Adios</i>	Common Chamorro goodbye, borrowed from Spanish
<i>How's it (?)</i>	Common Guam English greeting, used for both “hello” and “how are you?” An answer to the question is generally not expected.

The greetings are also used in written form. Names are occasionally signed with the Chamorro definite article “si”, preceding the person’s name (“Kind regards, *si* Maria”).

Culturally relevant terminology

Occasionally, locals use Chamorro terms because they feel that there is no appropriate English term to refer to the same feeling or entity:

Mago 'dai ([magoʔdai]), describes the urge to pinch or squeeze a cute baby. My informants described it as follows:

Example a)

“There’s no English word to, like, describe how you look at, like, something cute, like a baby, and you just kind of, like, grid your teeth and you want to, like, pinch them. You know, so that's what the word is.”

Example b)

“So, it's just, yea, like, uh, something like, you see a baby and the baby is really fat and you just want to pinch it. You say ‘oh I'm ge- I'm getting *mago 'dai*,’ it's like, I don't know, I- yea it's so funny.”

Atan baba ([atan baba]), describes a mean look, similar to the term “stink eye” in American English. Example: “I think my son is finally growing out of his *atan baba* phase.”

Ekgu'i (also *egu*) ([ekguʔ]; [egu]), describes jealousy, specifically concerning a sexual partner’s infidelity. Example: “Honestly, I don’t wanna date guys on Guam. One word: *egu*!”

Terms deriving from languages other than Chamorro

<i>Haole</i>	Refers to mainland Americans or Caucasians in general. It is also commonly used on the island of Hawai'i. Depending on the context, the term has a neutral or derogatory notion. Example: "My oldest daughter married a <i>Haole</i> ."
<i>zories</i>	Flip flops or slippers, Japanese origin (Zōri, 草履), also found in other Pacific varieties of English. Example: "The dog stole my <i>zories</i> ."

English terms used differently from General American English

<i>Air-con</i>	Air-conditioning, which is commonly referred to as A.C. in many but not all parts of the mainland U.S.
<i>color red</i>	Colors are often preceded by the word <i>color</i> . Example: "My car is <i>color red</i> ." In Chamorro, the word <i>kulot</i> (borrowing from Spanish <i>color</i>) can precede color names. In most cases, this is voluntary, apart from a few color exceptions where <i>kulot</i> always precedes the name of the color (eg. <i>kulot de rosa</i>) (Kuper, 2017, personal communications).
<i>dark complected</i>	Used to refer to skin complexion. Example: "A male individual whom she described as male, dark complected."
<i>fuck you</i>	Apart from a derogatory meaning, this phrase also has notions of admiration or incentive. Example: " <i>Fuck you</i> , dude, that's awesome."
<i>On/off the light</i>	Used when talking about switching the light on/off. Example: " <i>On the light</i> , please!"
<i>follow</i>	Meaning accompanying/going with. Example: "Sometimes friends from the military school would <i>follow</i> me to like family events."
<i>shoot</i>	Carries a number of meanings: It can represent a term of agreement, often as a marker to end a conversation or initiate action (" <i>Shoot</i> , I'll

meet you there, bye”). It can also be used in a context similar to *shit* or *gosh* (“oh *shoot*, we’re gonna miss that flight.”).

5.1.5 *Non-Verbal Communication*

A few non-verbal traditions in Guam have been passed on from Chamorro culture, especially for interactions with elders. The elders in the community, also commonly referred to as “*Manåmko*” (Chamorro origin, Guam English pronunciation: [manamkou]), enjoy a high level of respect in the community. They are traditionally greeted and honored with a bow, where the greeter smells the elders’ right hand. This is considered a form of taking in the essence of their wisdom and is referred to as *man nginge’* (Aguon, 2018). Elders are also greeted with a kiss on the cheek. A kiss on the cheek as a form of greeting is also common among the younger generations. Other forms of non-verbal greetings are hugs and fist bumps, as well as handshakes in more formal situations. Young males often show the *shaka* hand sign, particularly when posing for photos. From a close fist, the thumb and smallest finger are extended. This is a custom also common in Hawai’ian youth groups, where it is also referred to as “hang loose” and associated with relaxed surfer culture.

Eye contact between men and women is sometimes limited. When I was interviewing an older Chamorro male, for example, he made eye contact almost exclusively with my partner, who had accompanied me to the interview and was sitting off to the side, reading a book, while waiting for me. Even though I was the one asking the questions and back-channeling the replies, the participant’s speech appeared to be directed at my partner. In discussing the experience with other islanders later on, I learned that a man’s limited eye contact with a woman is a sign of respect.

5.1.6 *Summary and Interpretation*

To summarize the findings of the general overview of Guam English, the variety appears to both show similarities as well as differences to an American English standard in all aspects of the language, including phonetics and phonology, morpho-syntax, lexis, stress and intonation.

It is the oldest segment of the population, i.e. the *Manåmko*’, that shows the widest range of non-standard features. Many of those features are shared with the substrate language, Chamorro, and are also found in other World Englishes. Two features that most saliently resemble the substrate language are the stress and intonation pattern of older speakers, who put the stress on the penultimate syllable and have a sing-song-like rising and falling of pitch similar to Chamorro, as

well as the use of Chamorro lexis, especially for fauna, flora and kinship terms. The phonological features that resemble the Chamorro language are the merged vowels KIT and FLEECE, for which Chamorro prefers FLEECE in stressed syllables, the lack of glide in FACE and GOAT, the limited aspiration of /p, t, k/, and the lack of the following consonant sounds in a word-final position: /b, d, g, tʃ, dz/. The fact that /f/ and /z/ are not part of the Chamorro sound system might explain the replacement of the same sounds with [s] in Guam English. For older Filipino informants, it is the trilled /r/, the production of TRAP as [a], the collapse of /p, b/ and /f, v/ and the replacement of /θ, ð/ with /t, d/ that resembles a Filipino substrate language or Philippine English. Many of the phonological features found in older Guam English speakers are also common in other world Englishes. There reportedly is a great deal of overlap between KIT and FLEECE in other Englishes, for example in Palmerston Island (an atoll in the Cook Island group) (Hendery, 2015). Glide reduction in FACE and GOAT, for example, is also found in Palauan English (Britain and Matsumoto, 2015), in Peranakan English in Singapore (Lim, 2010) or in American Indian English (Coggshall, 2015). The realization of /f/ and /z/ as [s] are also found in American Indian Englishes, such as Tsimshian English (Cook & Sharp, 1966) and Pima English (Nelson-Barber, 1982).

Morpho-syntactic features that show similarities to Chamorro are the frequent use of present tense to refer to past events, which may be influenced by the fact that Chamorro only has future and non-future tense marking. The interchangeable male/female pronouns may also be a result of substrate language influence, as Chamorro does not distinguish between the two genders. Other World Englishes, such as Fiji (Hundt, Biewer and Zipp, 2013), Bislama (Meyerhoff, 2013) or the Falkland Islands (Britain and Sudbury, 2013) also use present tense to refer to continuative or experiential perfect.

What I interpret from my linguistic findings that show similarities to the Chamorro language but also to other World Englishes is that the non-standard features may have derived either from substrate language influence or from more general linguistic processes, such as simplification, that other languages are subject to as well.

Among the younger participants, there are many standard American English speakers that employ only few reoccurring Guam English peculiarities. Stress and intonation only resembles Chamorro in basilectal younger speakers, the use of present tense to refer to past events and the interchangeable use of he/she pronouns are virtually absent in younger speakers. Apart from a more standardized morpho-syntax, other features found in younger speakers resemble American

regional or ethnic dialects or sociolects. The frequent use of *like* as a discourse marker or the occasional up-talk are only a few examples. Although these features are now found in many varieties around the world, they are particularly associated with young female California speakers (Eckert, 2008). As the next subchapter will show, an alignment towards an American regional or ethnic variation is also potentially happening on a phonological level, as the short front vowels show similar apparent time changes as the ones happening, for example, in ethnic California English, such as Chicano English but also Korean or Chinese American English (*Chapter 4 – Results, Part 2*).

There are various social factors that influence the stratification between standard and non-standard speech. Particularly noticeable is the above mentioned difference between older and younger speakers, but also the difference between basilectal and acrolectal speakers. There are also noticeable differences between some, but not all of the analyzed ethnic groups and potentially between male and female speakers. In what ways the social stratification is organized will be elaborated on further in *Chapters 4 – Results, Part 2* and *Chapter 4 – Results, Part 3* as well as in the *Discussion and Conclusion*.

5.2 *Part Two - Quantitative Analysis of the Short Front Vowels*

After having given an overview of several features of Guam English, I will take a closer look at a subsample of 40 Chamorro speakers and their production of one specific set of features, the short front vowels KIT, DRESS and TRAP, and the two reference vowels FLEECE and FACE, with an analysis that is going into much more detail and does not only rely on auditory analysis, but also on quantitative acoustic analysis with exact formant measurements. In this section I will show that a number of the analyzed vowels appear to be changing in apparent time. The positions of the short front vowels KIT and DRESS, as well as the reference vowel FACE are significantly dependent on the social factor *age*. Furthermore, the production of DRESS appears to be dependent on the speakers' age as well as sex and the two factors show an interaction. The production of FLEECE appears to be dependent on the speakers' sex only. For the third short front vowel, TRAP, a potential speaker difference in regard to the phonological environment is found and is connected to the speakers' age.

All five analyzed vowels show considerable variation depending on the position of the vowel in its phonological environment. The level of education did not prove to be significantly influential on any of the vowel positions in this analysis.

5.2.1 *The Short Front Vowels in Apparent Time*

The development of the vowels in apparent time is illustrated in fig. 46. The graph shows the analyzed short front vowels KIT, DRESS and TRAP and the two reference vowels FLEECE and FACE, with individual data points representing the Lobanov normalized vowel mean (z_2 midpoint- z_1 midpoint) for every Chamorro speaker of the analyzed data subset (y-axis). The change in vowel position is plotted in light of the speakers' age (x-axis), which illustrates how these five vowels may have changed over time. A positive value on the y-axis represents a higher and fronter position of the vowel. The graph shows KIT and FLEECE positioned close together for older speakers, suggesting a more merged pronunciation of the two vowels. The distinction between these two vowels is increasing in younger speakers, potentially due to the changing position of KIT, which is produced in a lower, backer position in younger speakers.

DRESS appears to be in a lower and backer position in younger speakers compared to older speakers, moving closer to the position of TRAP in the vowel space. TRAP appears to remain

relatively steadily low and back across generations, but, as a closer look at the vowel will show in *section 5.2.2 - TRAP*, the position of TRAP may vary depending on its phonological environment and the speakers' age. Finally, the reference vowel FACE, which is treated as a monophthong in this dataset, is more raised and more fronted in younger speakers compared to older generations.

Fig. 46 (change over time) also shows a noticeable shift in vowel production pattern of the post-WW2 generation segment of the data, around the ages of 60 to 75, compared to the rest of the data. The production pattern for all three of the short front vowels and the two reference vowels appears to level out and stay relatively constant in the speakers below the age of 60, whereas it is changing in a much steeper pattern for that post-war generation.

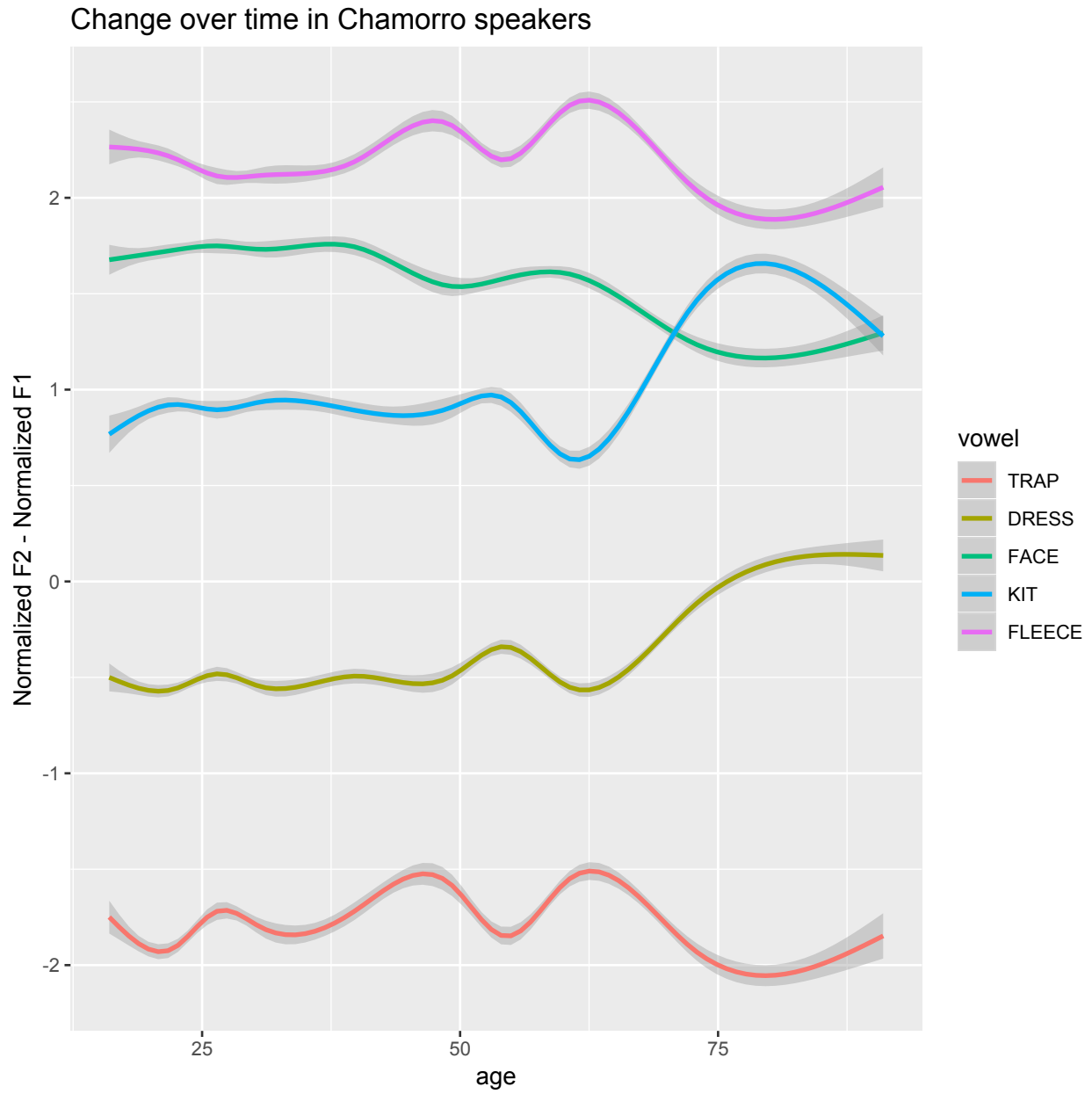


Figure 46 - Change over time in Chamorro speakers for the three short front vowels KIT, DRESS, TRAP and their two reference vowels FLEECE and FACE.

How to read this graph: Each line in the graph represents one of the five analyzed vowels (TRAP, DRESS, FACE, KIT and FLEECE) and its changing position in the vowel plot across generations. Whenever the line is in a higher position in the graph, we can assume a higher and fronter vowel position in the vowel plot compared to lower values on the line, which represents a comparatively lower, backer position. This is due to the fact that the value on the y-axis represents a collapsed version of the normalized values of the vowels' F1 and F2 measurements, indicating a diagonal movement from low back to high front in the vowel space. Take the line of the vowel DRESS as an example: The line remains relatively steadily around the -0.5 mark on the y-axis in younger speakers, but raises above the zero mark in older speakers. This indicates that the vowel is produced higher and fronter in older speakers compared to younger speakers. Whenever the individual lines come in contact with the line of another vowel, this indicates that the vowels are positioned close together in the vowel plot. It would be far-fetched to assume that the vowel positions in fact move up and down across age groups as frequently as these wavy lines indicate. A focus on the general developmental trends is therefore advisable and will be what I focus on in the interpretation of this graph on the following pages. Hence, the most significant shift that can be observed in fig. 46 is the difference in vowel production between the oldest segment of the dataset and the rest of the speakers.

Those social factors that significantly influence the vowel position of KIT, DRESS, TRAP, FLEECE and FACE are summarized in table 10 and will be discussed in more detail in the following sections, along with other notable patterns found for each vowel.

Vowel	Age	Sex	Interaction Age*Sex	Level of Education	Phonological Environment	Interaction Age*Environment
KIT	** Retracting in younger speakers	--	--	--	***	
DRESS	*** Retracting in younger speakers	*	*	--	***	
TRAP nasal system	--	--	n/a	--	***	***
FLEECE	--	*	--	--	***	
FACE	*** fronted in younger speakers	--	--	--	***	

Table 10 - Overview of the findings, indicating relevant social factors and their influence on the vowels KIT, DRESS, TRAP, FLEECE and FACE. Note that a slightly altered model was considered for the vowel TRAP, where the phonological environment was reduced to only two factors - pre-nasal and pre-oral - with an additional test for interaction between *age* and *phonological environment* (see “TRAP nasal system” in the table above and the discussion in *section 5.2.2 - TRAP*).

* p<0.05; ** p<0.01; *** p<0.001

To illustrate the significant influence of the social factor *age* on the position of short front vowels KIT and DRESS and the reference vowel FACE, normalized vowel plots are presented in figs. 47 and 48 to allow for direct comparison between older and younger speakers. As sex is an additional potentially influential factor for some vowels, they are separated into a male and female group. As shown in fig. 46, one can expect the older speakers of both sexes to show more of an overlay of

the vowels KIT and FLEECE, as KIT is found to be raised in older speakers, potentially to a position close to FLEECE. As DRESS appears to be lowering and backing in younger generations, it is expected to be more distinct from TRAP in older speakers, while moving closer to the position of TRAP in younger speakers.

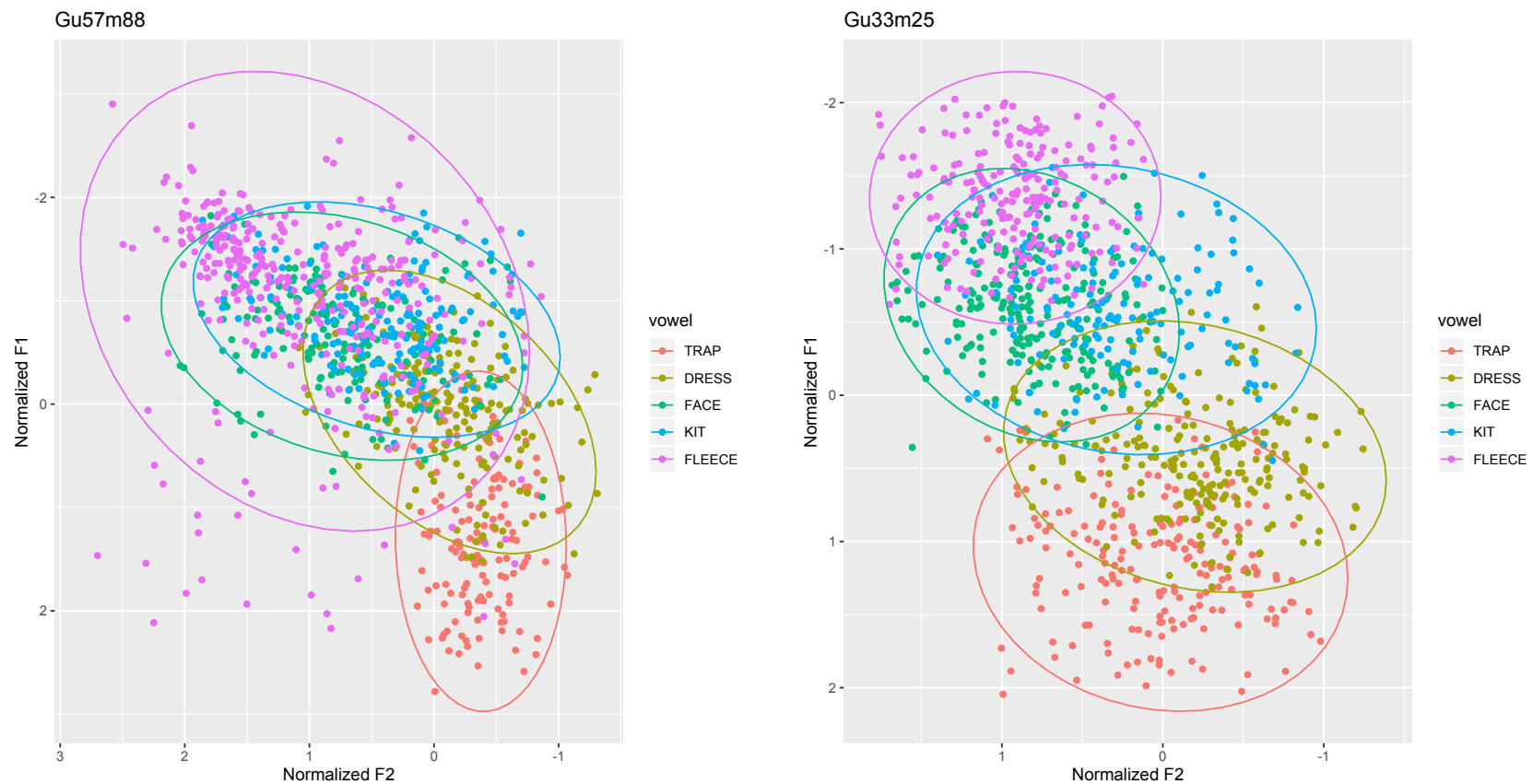


Figure 47 - Vowel plot of representative older (left) and younger (right) male Chamorro speakers, showing the short front vowels TRAP, DRESS, KIT and two reference vowels FLEECE and FACE. KIT and FLEECE show more overlap in the older speaker and are more distinct in the younger one, with KIT being produced in a backer position. DRESS is produced higher and fronter than TRAP in the older speaker but is produced further back in the younger speaker, to a position where it is just as back but slightly higher than TRAP.

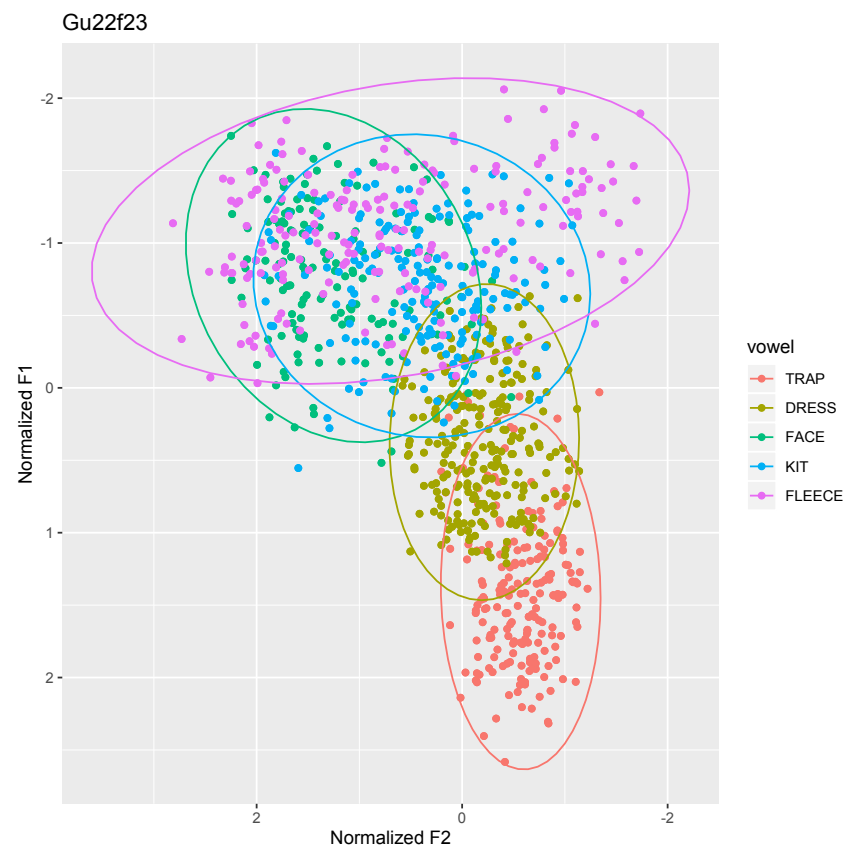
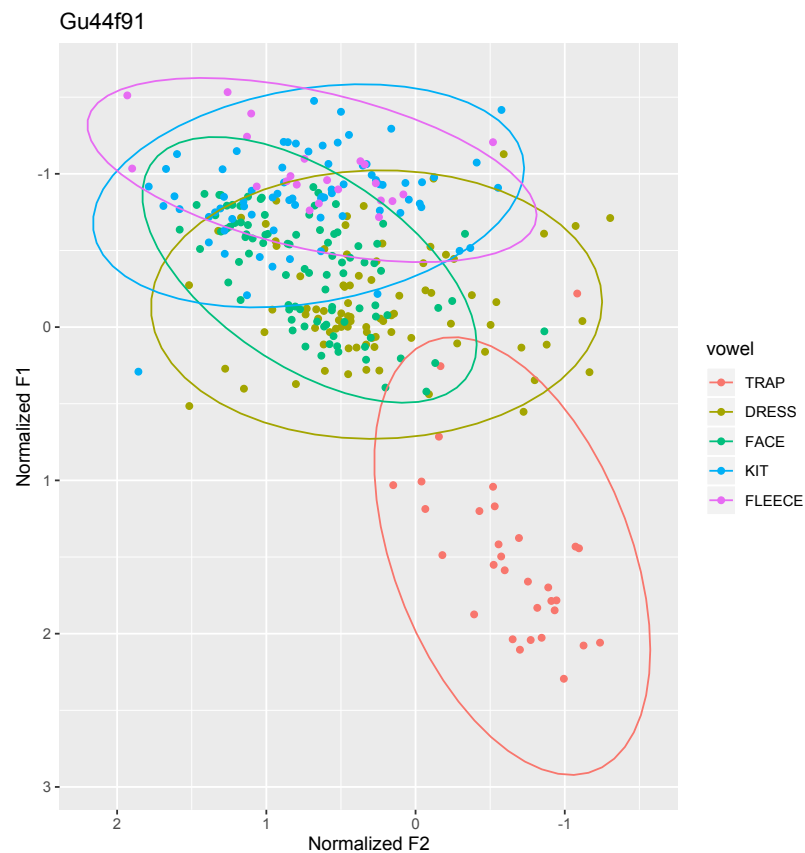


Figure 48 - Vowel plot of representative older (left) and younger (right) female Chamorro speakers, showing the short front vowels TRAP, DRESS, KIT and two reference vowels FLEECE and FACE. KIT and FLEECE are almost entirely overlapping in the older speaker, but are more distinct in the younger one, with KIT being produced in a more backer position. TRAP and DRESS show almost no overlap in the older speaker, where DRESS appears to be further back in the younger speaker, to a position where it partially overlaps with TRAP.

The following section will look at each front vowel and the two reference vowels in more individual detail and discuss and illustrate the significant results.

5.2.2 TRAP

A total of 6313 tokens of TRAP were included in the final statistical analysis, with a mean of 157.82 tokens per speaker. Table. 11 below shows the statistical model used for the analysis of the vowel position and its dependence on the social factors *sex*, *age* and *level of education*, as well as the *phonological environment*. The phonological environment, which is reduced to two categories – pre-nasal and pre-oral – appears to have a significant effect on the position of the vowel. Additionally, the model shows a significant interaction between the factors *age* and *phonological environment*, suggesting that a nasal system may more in some age groups but not others.

Vowel TRAP	Age	Sex (male)	Level of Education (higher)	Phonological Environment (nasal)	Interaction Age*phonological environment (nasal)	(Intercept)
coefficient	-1.670e ⁻⁰³	6.935e ⁻⁰²	5.612e ⁻⁰²	2.662e ⁻⁰¹	3.839e ⁻⁰³	-1.981e ⁺⁰⁰
p<0.05	--	--	--	2.59e ⁻⁰⁸ ***	1.72e ⁻⁰⁶ ***	2e ⁻¹⁶ ***

Table 11 - Model of TRAP vowel position and its dependence on the social factors *age*, *sex*, *level of education*, *phonological environment* and the interaction between *age* and *phonological environment*.

The position of TRAP fluctuates across generations, as fig 49 shows. The fluctuation is particularly noticeable in the older generations, who produce both the highest and most fronted, as well as the lowest and most backed tokens in the dataset. This tendency is also illustrated in fig. 50, where older speakers (in grey) are scattered across the vowel space, while younger speakers (in black) are positioned more centrally, apart from three high-front outliers (Gu33m25, Gu6f27, Gu28f18). Despite the noticeable fluctuation of vowel production across generations, age alone does not appear to affect the vowel position significantly, as the statistical model shows.

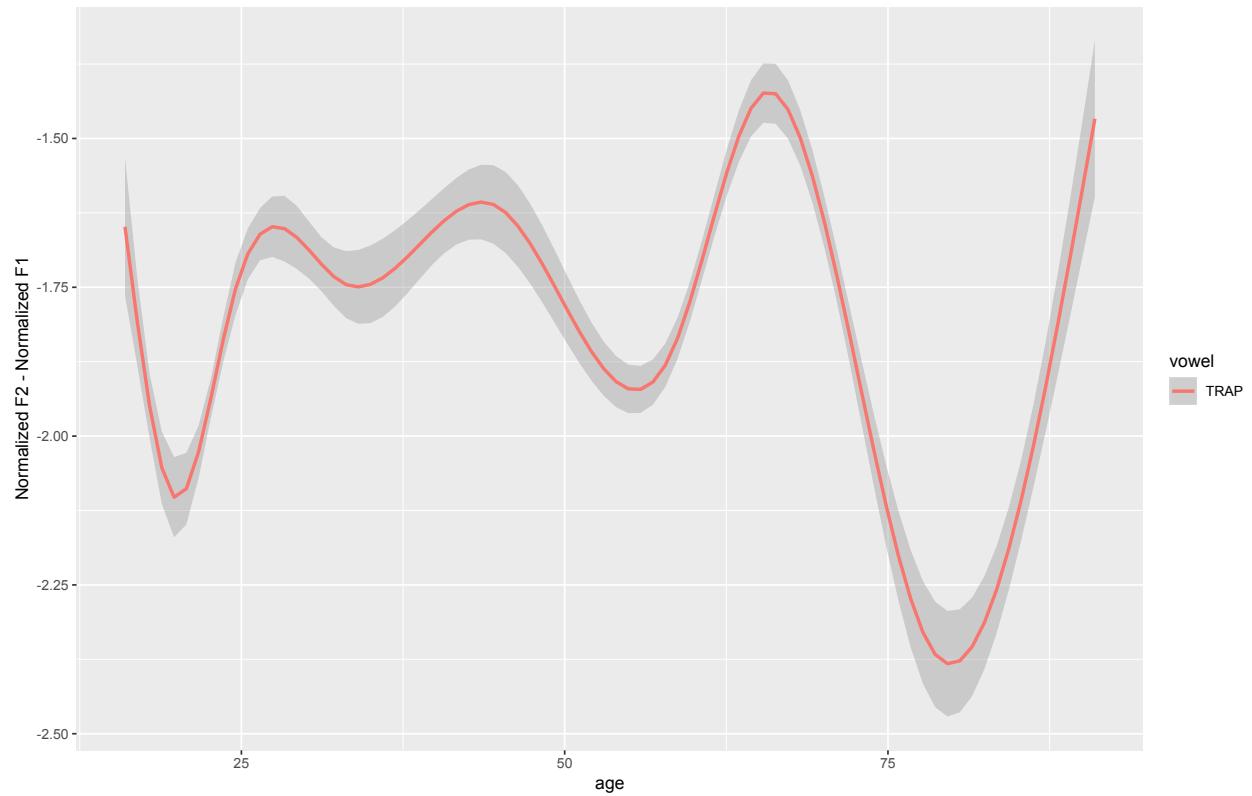


Figure 49 - Change over time in the vowel TRAP. No clear tendency towards vowel fronting/raising or backing/lowering is visible. Rather, the production appears to be rather variable across all ages.

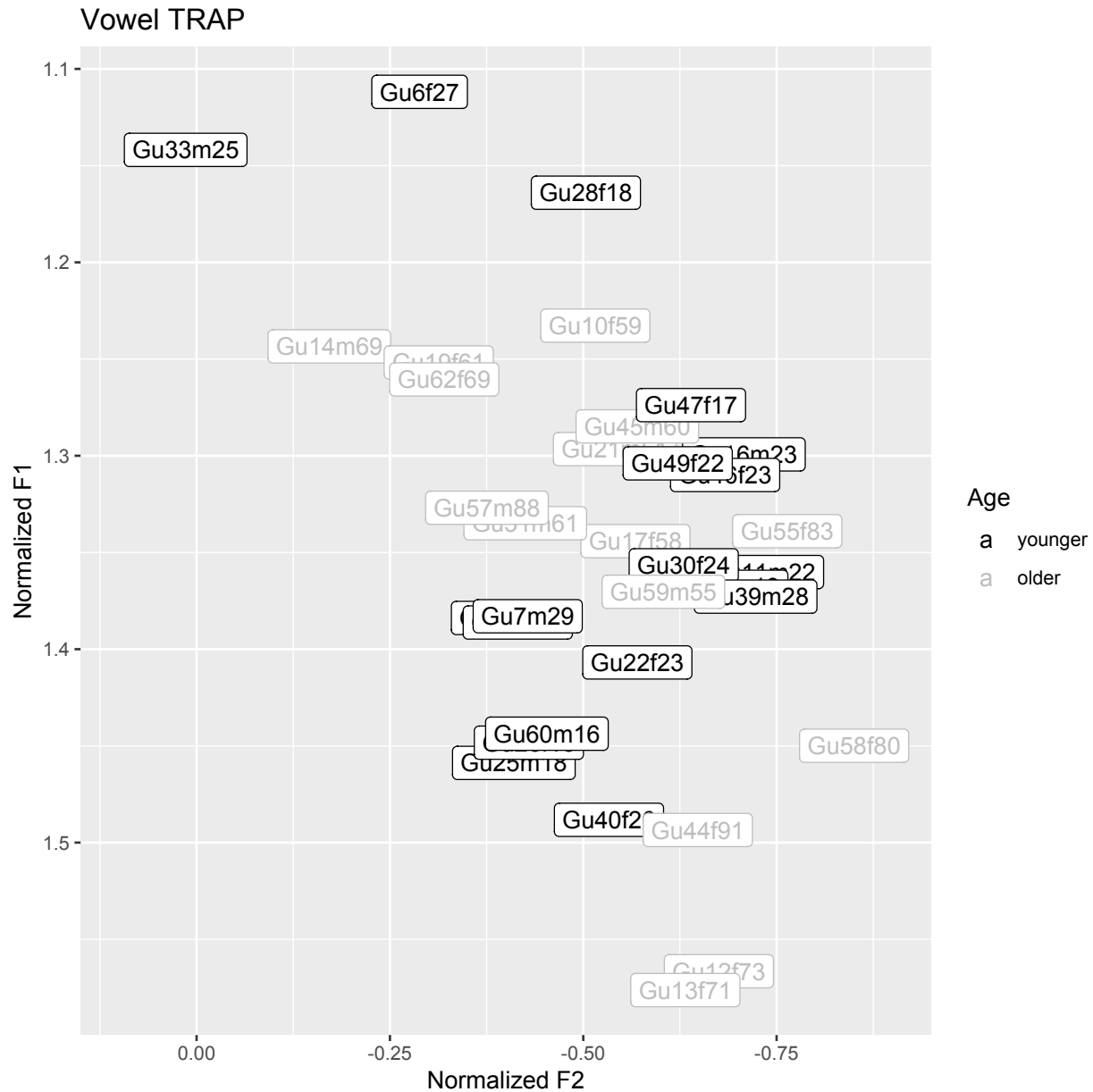


Figure 50 - Position of the vowel TRAP for individual Chamorro speakers. No clearly visible generational grouping of older speakers (labelled in lighter grey) and younger speakers (labelled in darker grey), though the TRAP production of three younger speakers (Gu28f18, Gu6f27, Gu33m25) is positioned relatively high in comparison to the rest of the group. Note that this graph only illustrates the oldest and youngest segment of the dataset, while speakers in between are not plotted. This serves the purpose of illustrating potential age difference between the oldest segment and the youngest speakers. Younger speakers are categorized as between 16 and 29 years of age and older speakers are categorized between 45 and 91 years old⁵¹).

⁵¹ This is in accordance with the categorization of older and younger speakers in (Drager, Kirtley, Grama, & Simpson, 2013). Note, *age* was treated as a numerical factor in the statistical analysis and is only categorized for the purpose of illustrating the age difference in this graph.

Only in connection with the phonological environment do we see a significant age difference regarding the vowel production. Fig. 51 shows the variable production of TRAP in pre-nasal versus pre-oral environments. The difference between a pre-nasal and a pre-oral vowel appears to be particularly distinct in the post-WW2 generation (approximately between the ages of 55 and 75, see yellow marking in fig. 51), but also in younger speakers around the age of 25. In those two groups, TRAP is produced significantly higher and fronter in pre-nasal environments as opposed to oral environments. The noticeable difference in the speakers around 25 years old is potentially influenced by the three outliers discussed above. In other age groups, however, the difference between pre-nasal and pre-oral TRAP is far less pronounced or even non-existent, which further underlines my auditory impression that a nasal system is not necessarily common in Guam English speakers.

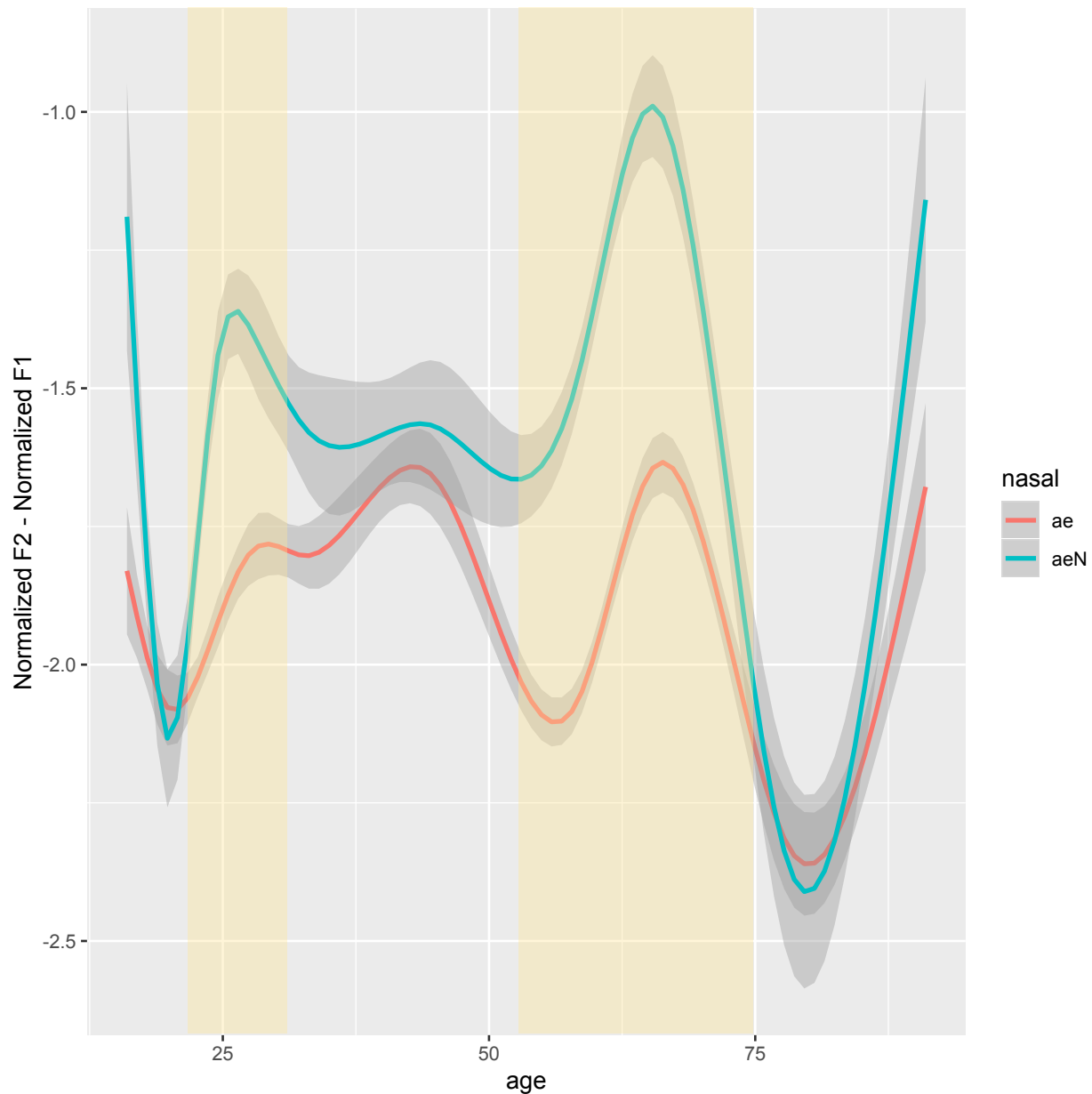


Figure 51 - Production of the vowel TRAP over time, separated into a pre-nasal (green) and a pre-oral pattern (red). The most distinct production in the two environments is found in the post WW2 generation, marked in yellow.

To further explore the presence and/or absence of a nasal system in Guam English, the vowel plots in fig. 52 illustrate the production of TRAP in pre-nasal versus pre-oral environments. A clear nasal split cannot be found in any of the presented speakers, but a representative male speaker born around 1956, Gu45m60, shows a much more distinct production in the two environments compared to the other three speakers presented in the figure. The oldest speaker in the dataset,

Gu44f91, born around 1925, shows practically no distinction between the two environments and of the two younger speakers, only one shows traces of a slight distinction.

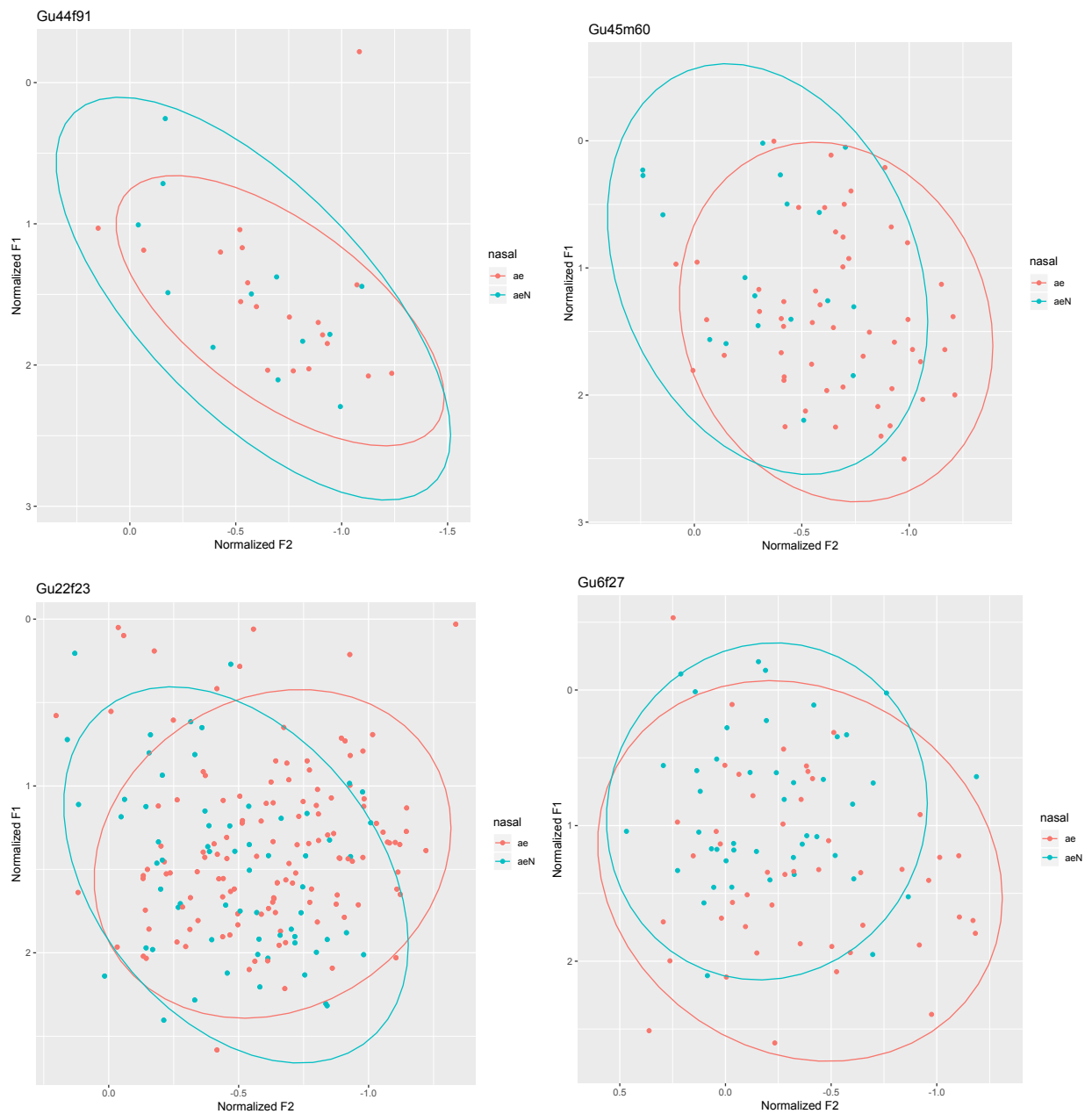


Figure 52 - Vowel plots of four representative female speakers. Only the two speakers in the right column show traces of a nasal system, suggesting that a nasal split is not as pronounced in Guam English (speaker codes: Gu44f91, Gu45m60, Gu22f23, Gu6f27).

5.2.3 DRESS

A total of 8252 tokens of DRESS were included in the statistical analysis, with a mean of 206.3 tokens per speaker. The speakers' age shows a significant influence on the position of DRESS, which confirms the assumption that the pronunciation of this vowel changes in apparent time. We find higher and fronter vowel values (i.e. higher Lobanov normalized F2-F1 measurements) in older speakers compared to younger speakers, which suggests a lowering and backing of the vowel over time. Fig. 53 shows the change of the vowel position in apparent time. To illustrate this age difference more clearly, fig. 54 shows the different positions of DRESS for younger and older speakers (with younger speakers being categorized as between 16 and 29 years of age and older speakers being categorized between 45 and 91 years old). The plot shows a rather clear grouping of the normalized vowel means of younger speakers (labelled in black) in a lower, backer position compared to most older speakers (labelled in grey).

The analysis further indicates that the vowel production is dependent on the social factor *sex*, as well as the two social factors *age* and *sex* interacting, but both factors show p-values that only just reach significance. Fig. 55 shows the mean vowel position of all Chamorro speakers. A grouping of four older female participants with vowel means in the very high and front vowel position stand out. Perhaps this gives insight into why the interaction between the two social factors *sex* and *age* shows borderline significant p-values, as mainly older females appear to be covering that high-front position. Keep in mind, however, that the corpus only has a limited number of older local male Chamorro speakers, as many of them had high mobility rates due to military enlistment and were therefore not included in the study. The production of DRESS in younger female speakers appears to be rather low and back.

The phonological environment also appears to significantly influence the position of the vowel. Out of the 19 analyzed environments, six environments show marginally significant p-values ($p \approx 0.05$), out of which only two approach $p \approx 0.001$, namely pre-voiced-apical-lateral (as for example in the word “well”) and pre-voiceless-labial-stop (as for example in the word “step”)⁵².

⁵² See section 4.3.6 - *Statistical Analysis* for a complete list of the analyzed phonological environments.

Table 12 shows the statistical model used for the analysis of the vowel position and its dependence on the social factors *sex*, *age*, *level of education* and *phonological environment*.

Vowel	Age	Sex	Interaction	Level of	Phonological	(Intercept)
DRESS		(male)	Age*Sex	Education	Environment	
coefficient	$1.040e^{-02}$	$2.946e^{-01}$	$-8.092e^{-03}$	$-1.114e^{-01}$	n/a ⁵³	$-5.022e^{-01}$
p<0.05	0.0005 ***	0.048 *	0.015 *	--	$2.2e^{-16}$ ***	0.06

Table 12 - Model of DRESS vowel position and its dependence on the social factors *age*, *sex*, the interaction of age and sex, as well as *level of education*.

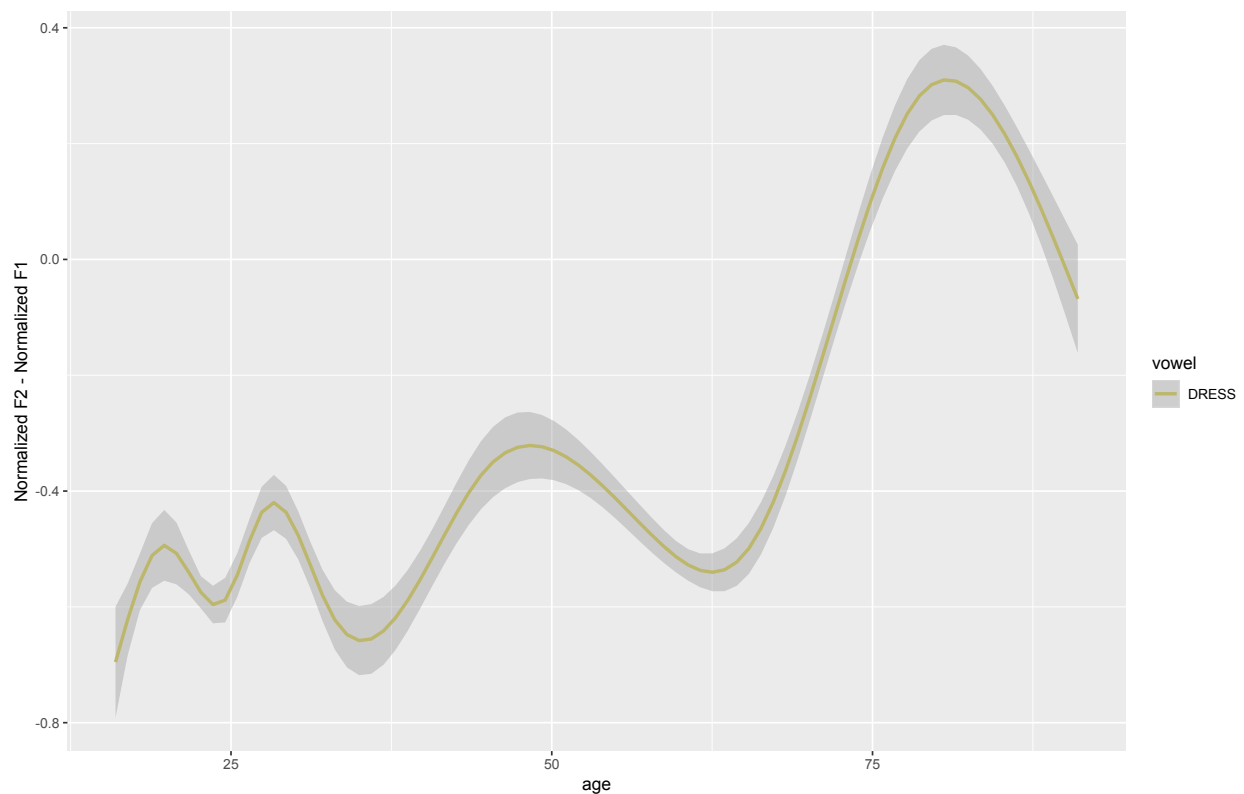


Figure 53 - Change over time for the vowel DRESS. Older speakers show a higher and fronter position of the vowel than younger speakers.

⁵³ As the factor phonological environment was split into 19 different categories, the individual coefficients will not be listed here.

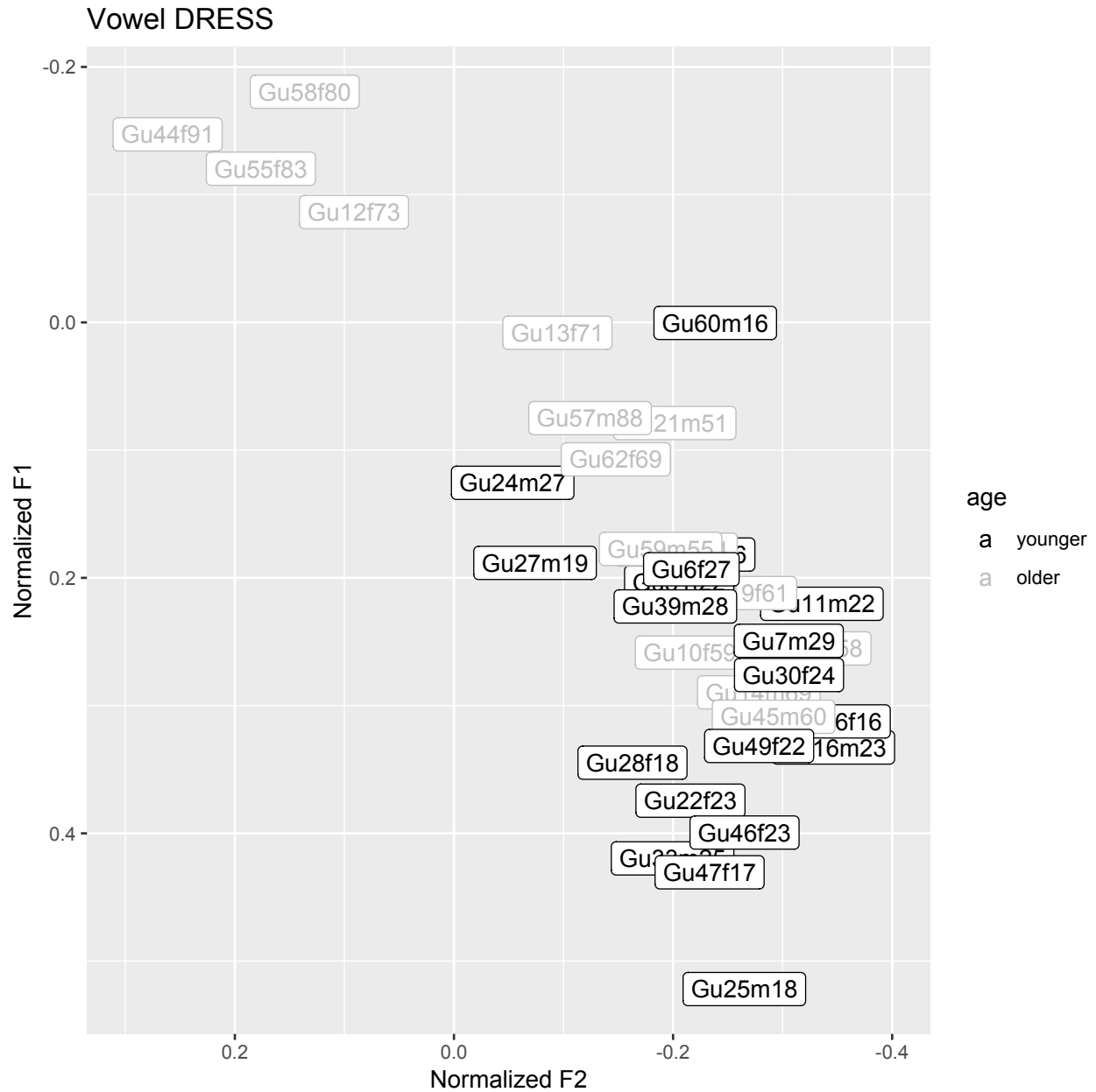


Figure 54 - Normalized vowel mean position for individual speakers categorized into “younger” (labelled in black, ages 16-29) and “older” (labelled in grey, ages 45-91) speakers to illustrate the age difference that may influence the vowel position of DRESS.

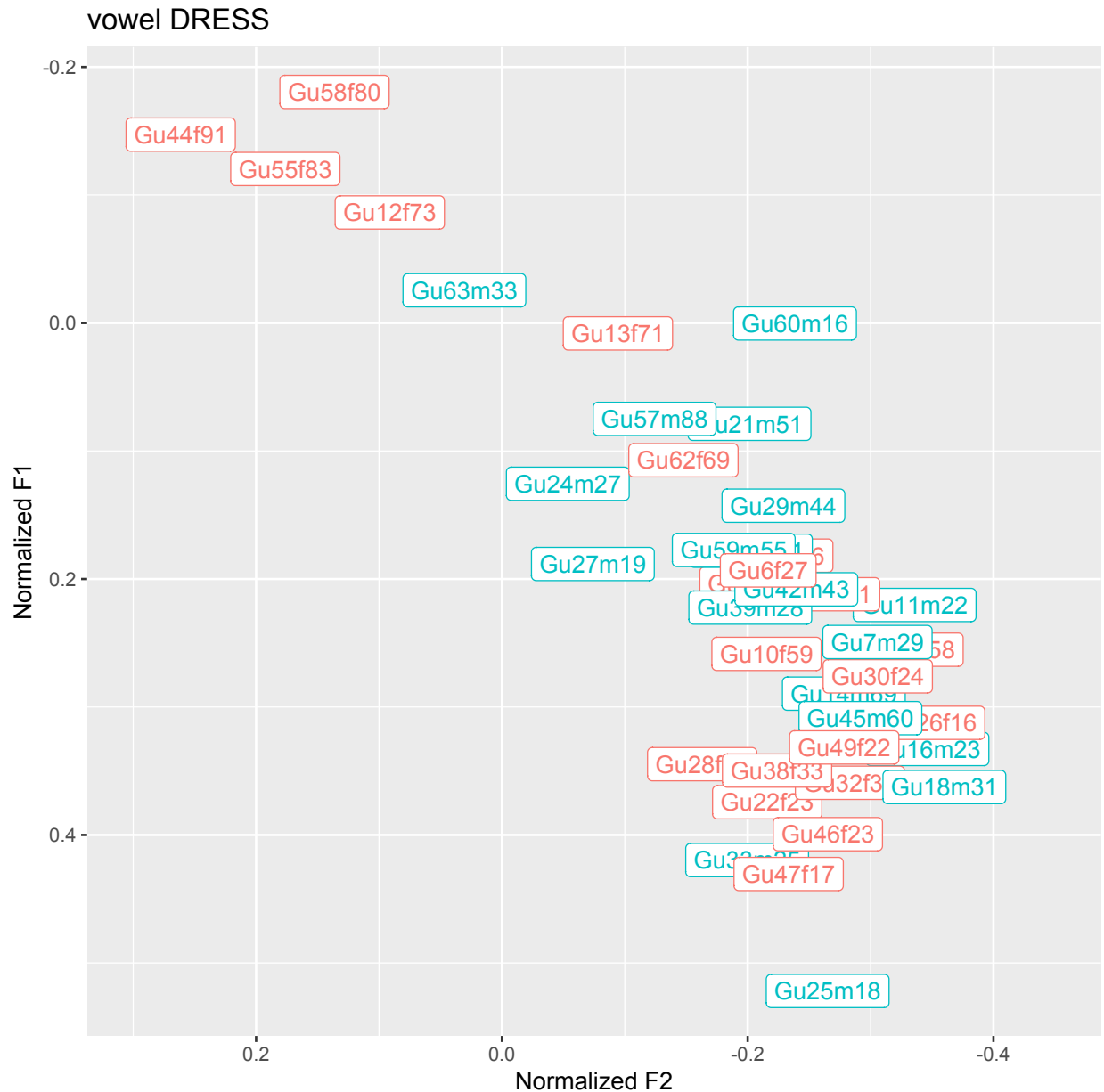


Figure 55 - Normalized vowel mean position for individual speakers categorized into “male” (labelled in blue) and “female” (labelled in red) speakers to illustrate the gender difference that may influence the vowel position of DRESS in connection with age.

For a more detailed presentation of the vowel position of DRESS in regard to the several analyzed phonological environments, figs. 56-59 give insight into the various positions of the vowel in each of the analyzed environments. Four representative speakers of different age groups and both genders are plotted. For each phonological environment, an example word is used. The plots don’t show a clear pattern of any one environment affecting the vowel in a similar way each time, apart

from the pre-voiced-apical-lateral position, such as in the word “well”: in three out of four of the speakers presented here, the vowel is produced noticeably back in this environment compared to the other environments. The other phonological environment that proved to be statistically significantly influential on the vowel position, pre-voiceless-labial-stop (as for example in the word “step”), shows less of a clear outlier pattern in the plots.

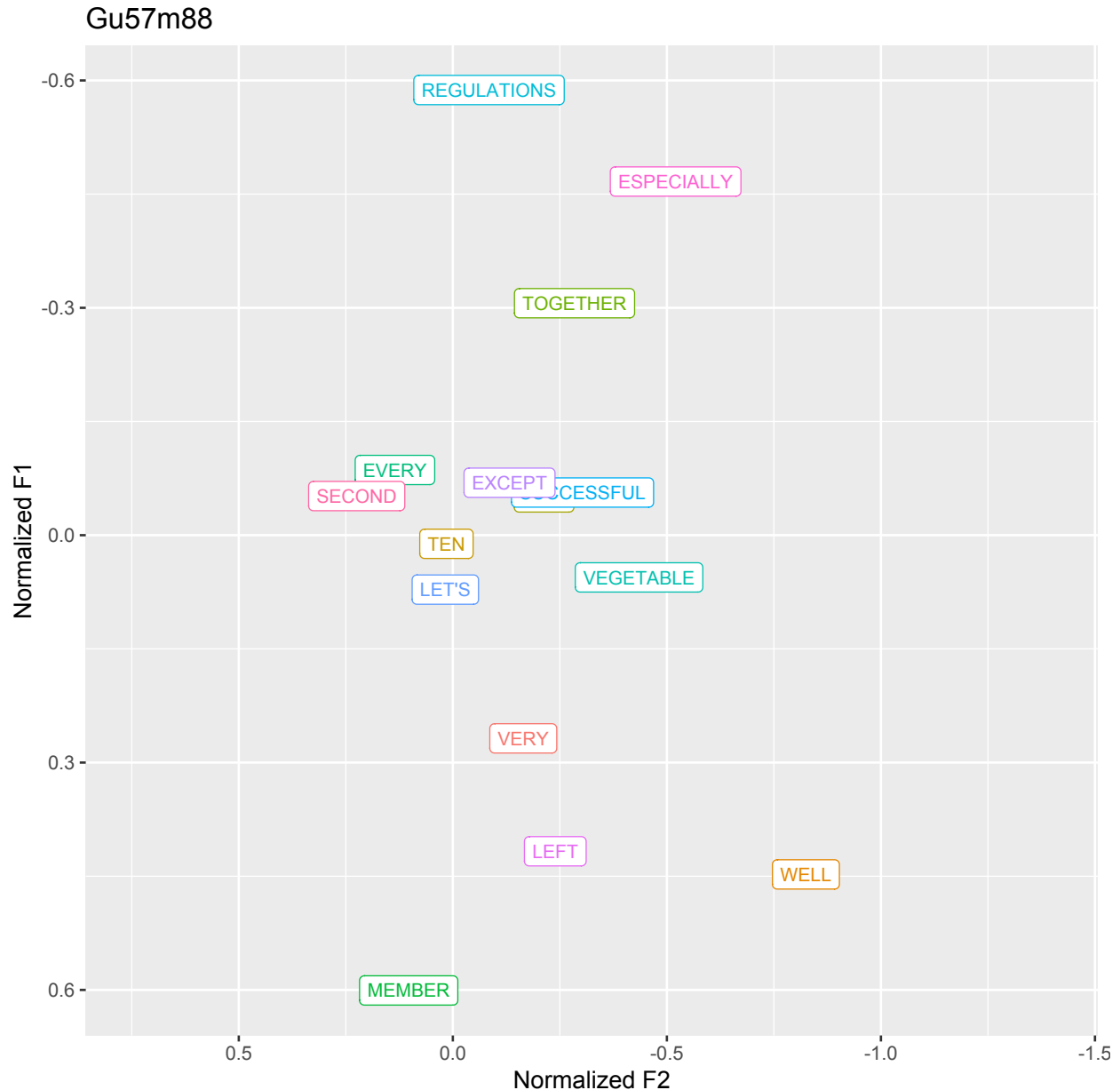


Figure 56 - Vowel mean position for individual phonological environments, in a representative older male speaker. Each example word represents a different phonological environment. Note a low back production of the pre-voiced-apical-lateral position, illustrated in the example word “well.” (Speaker code: Gu57m88)

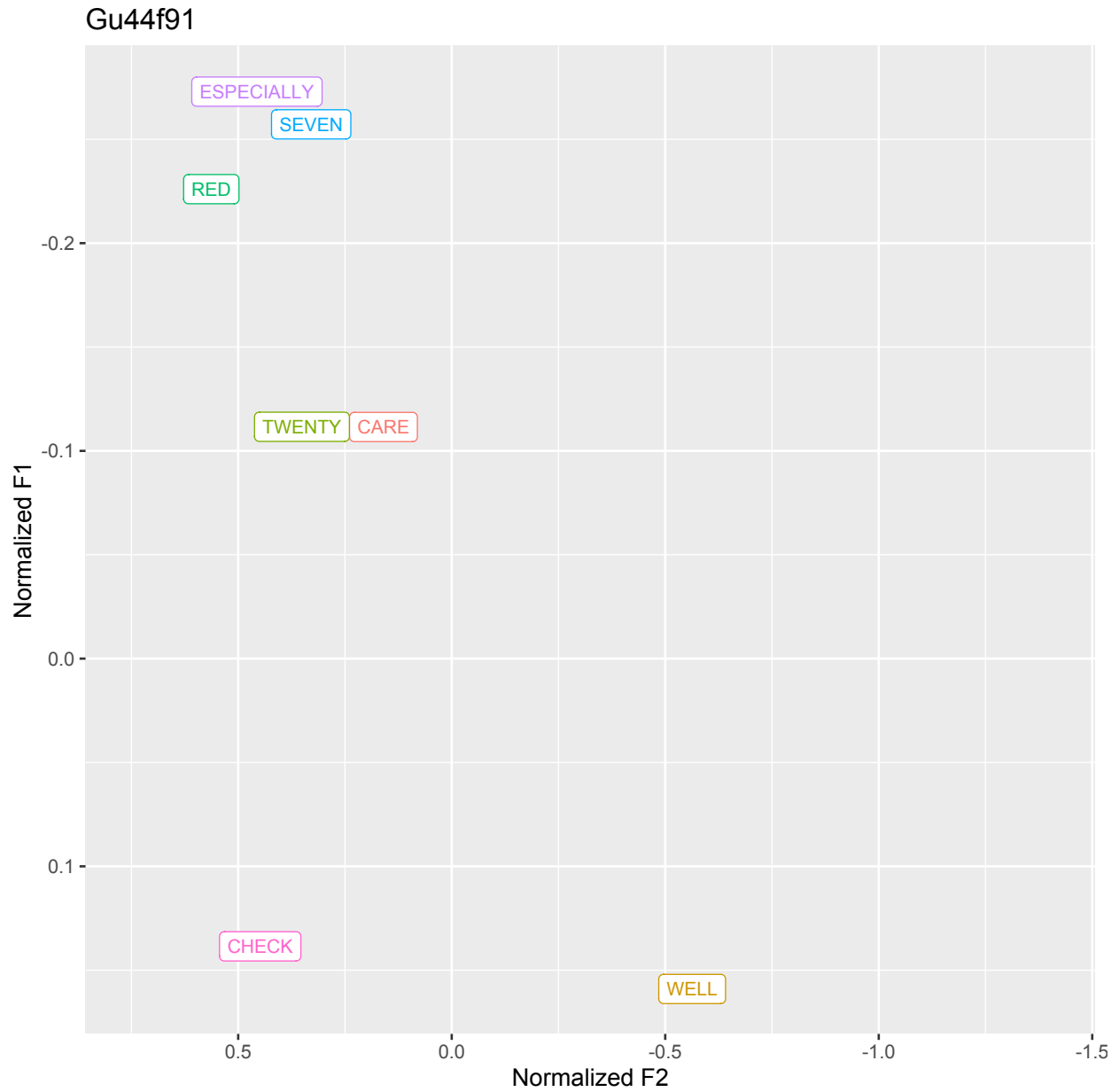


Figure 57 - Vowel mean position for individual phonological environments, in a representative older female speaker. Each example word represents a different phonological environment. Note a low back production of the pre-voiced-apical-lateral position, illustrated in the example word “well.” (Speaker code: Gu44f91)

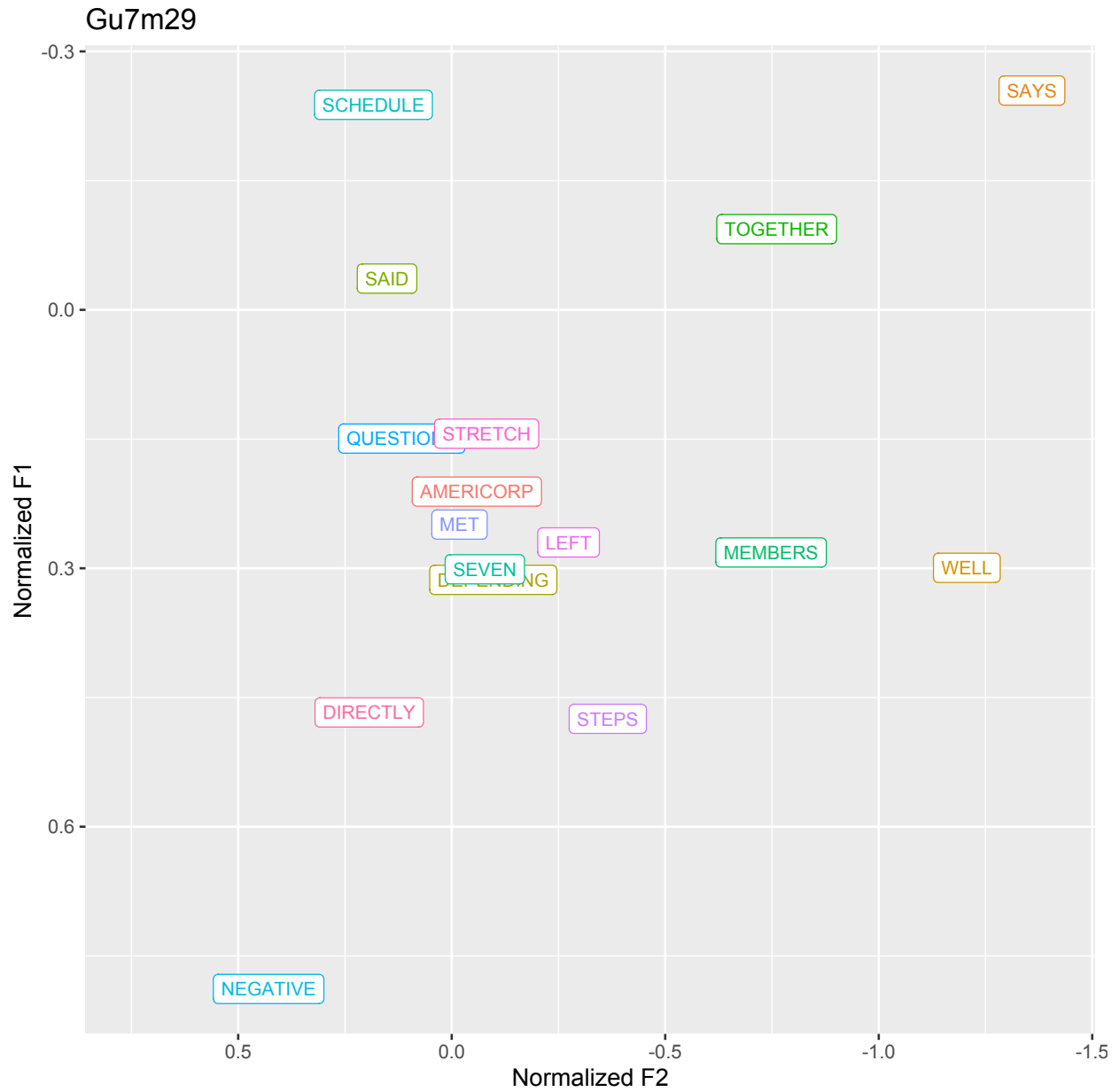


Figure 58 - Vowel mean position for individual phonological environments, in a representative younger male speaker. Each example word represents a different phonological environment. Note a back production of the pre-voiced-apical-lateral position, illustrated in the example word “well.” (Speaker code: Gu7m29)

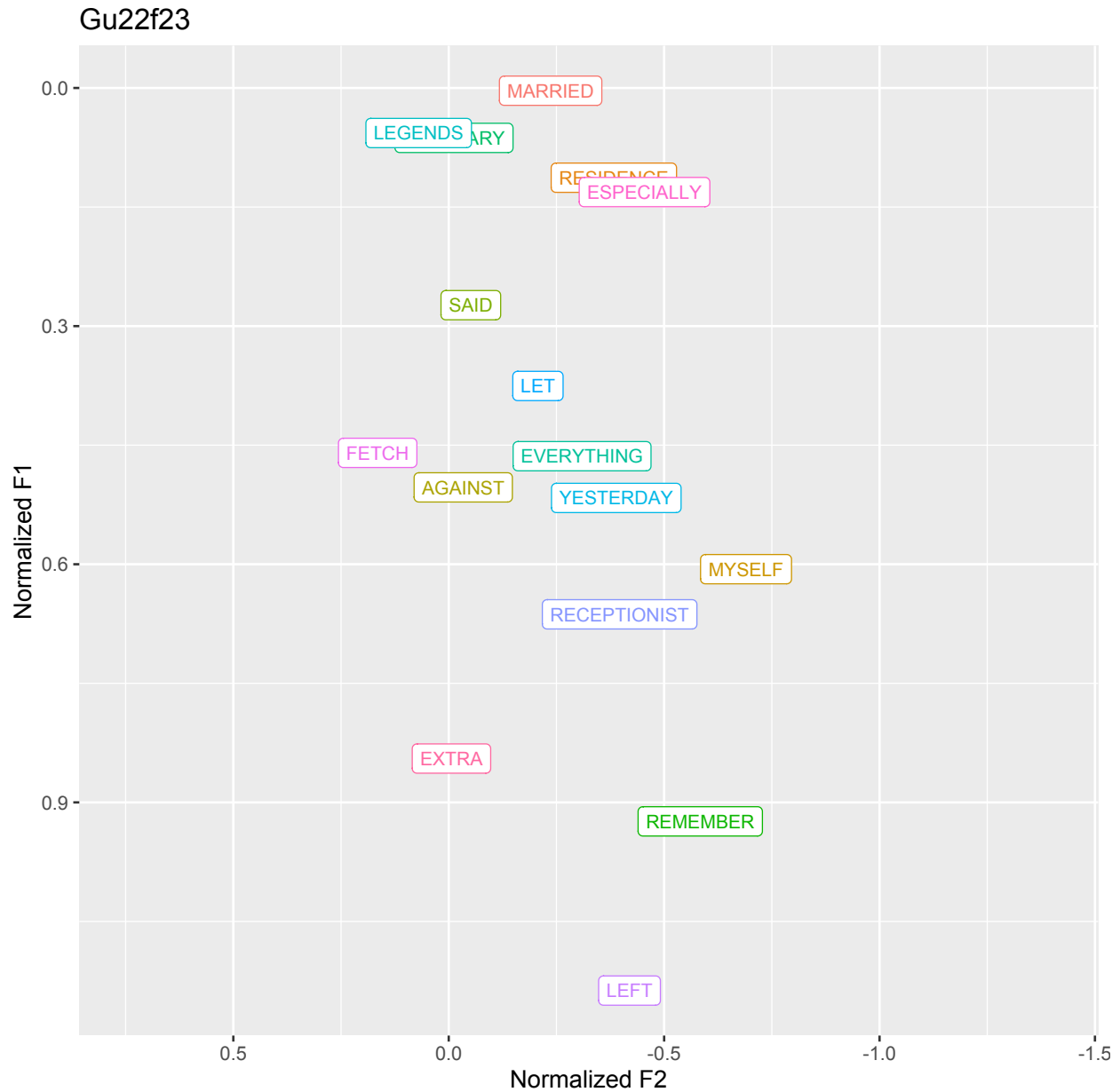


Figure 59 - Vowel mean position for individual phonological environments, in a representative young female speaker. Each example word represents a different phonological environment. (Speaker code: Gu22f23)

5.2.4 KIT

A total of 5688 tokens of KIT were included in the analysis, with a mean of 142.2 tokens per speaker. The position of KIT significantly varies depending on the speakers' age, suggesting that the vowel production is lowered in younger speakers compared to older speakers, as illustrated in fig. 60. Furthermore, the vowel position is significantly influenced by the phonological

environment it occurs in. Out of the 19 analyzed phonological environments, seven reach statistical significance, but only two reach a p-level below 0.001, namely pre-voiced-velar-nasal (such as in the word “think”) and pre-voiced-velar-stop (such as in the word “big”). Table. 13 shows the statistical model used for the analysis of the vowel position and its dependence on the social factors *sex*, *age*, *level of education* and *phonological environment*.

Vowel KIT	Age	Sex (male)	Interaction Age*Sex (male)	Level of Education (higher)	Phonological Environment	(Intercept)
coefficient	6.829e ⁻⁰³	1.147e ⁻⁰¹	-3.427e ⁻⁰³	-2.881e ⁻⁰²	n/a	-3.088e ⁻⁰¹
p<0.05	0.007 **	--	--	--	<2.2e ⁻¹⁶	

Table 13 - Model of KIT vowel position and its dependence on the social factors *age*, *sex*, the interaction of *age* and *sex*, as well as *level of education* and *phonological environment*.

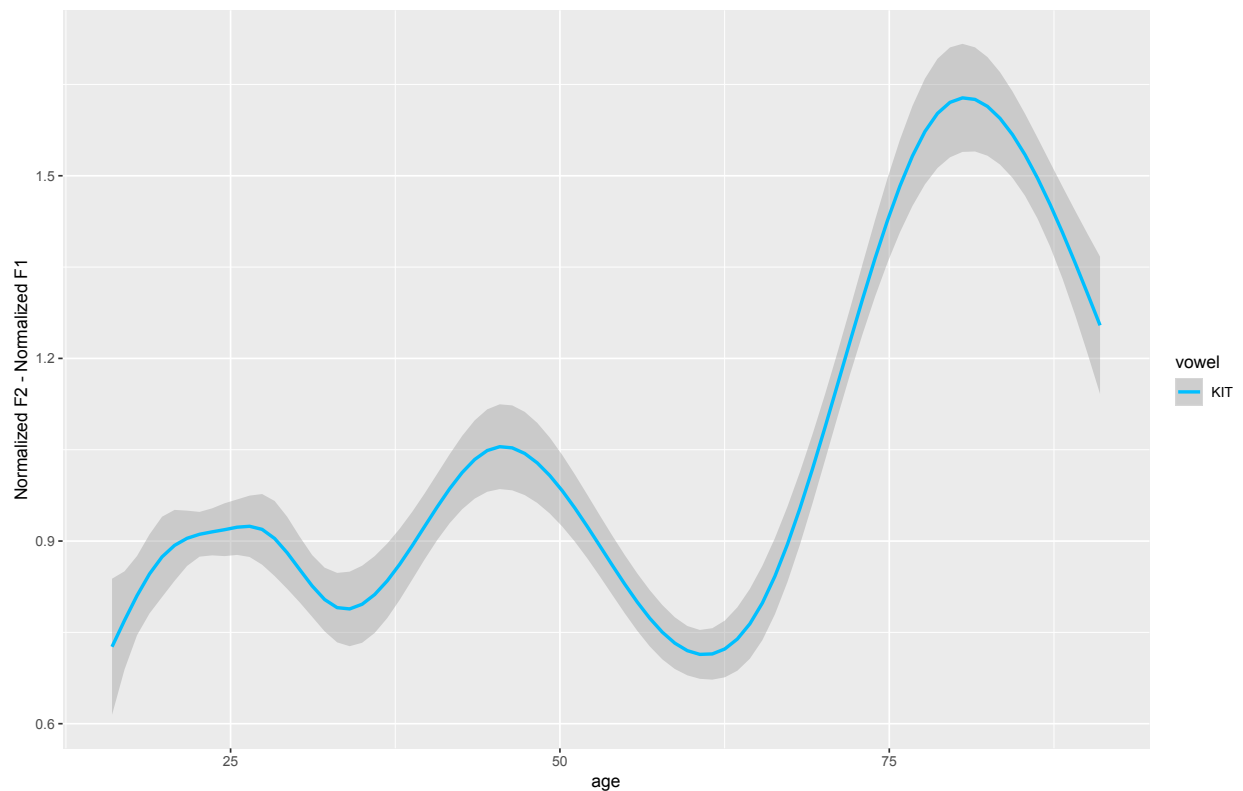


Figure 60 - Change over time for the vowel KIT. Older speakers show a higher and fronter position of the vowel than younger speakers.

Fig. 61 further illustrates the age difference found in connection with the production of this vowel. Speakers categorized as older (ages 45-91, labelled in grey) form a grouping with vowel means higher and fronter than their younger counterparts (ages 16-29, labelled in black).

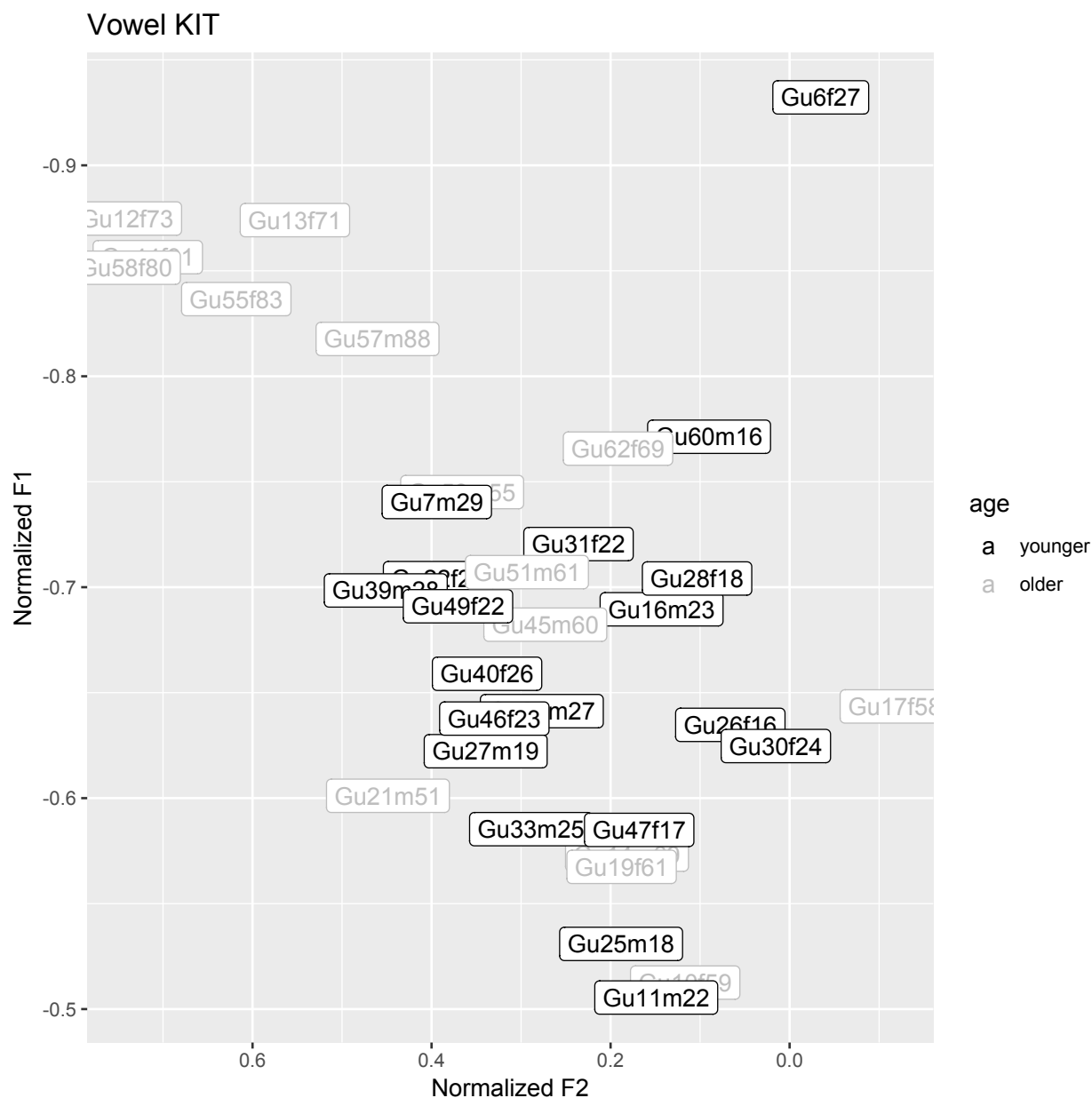


Figure 61 - Normalized vowel mean position for individual speakers categorized into “younger” (aged 16-29, labelled in black) and “older” speakers (aged 45-91, labelled in grey) to illustrate the age difference that may influence the vowel position of KIT.

A closer exploration of the vowel position in its various phonological environments generally reveals no clear pattern, despite two of the above mentioned environments (pre-voiced-velar-nasal, such as in the word “think” and pre-voiced-velar-stop, such as in the word “big”) showing significant p-values in the statistical model. Only one young female speaker in the here presented vowel plots (speaker code: Gu22f23) shows a noticeable distinct production of KIT before voiced velar stops. The vowel is produced higher and fronter in this environment than in any of the other environments.

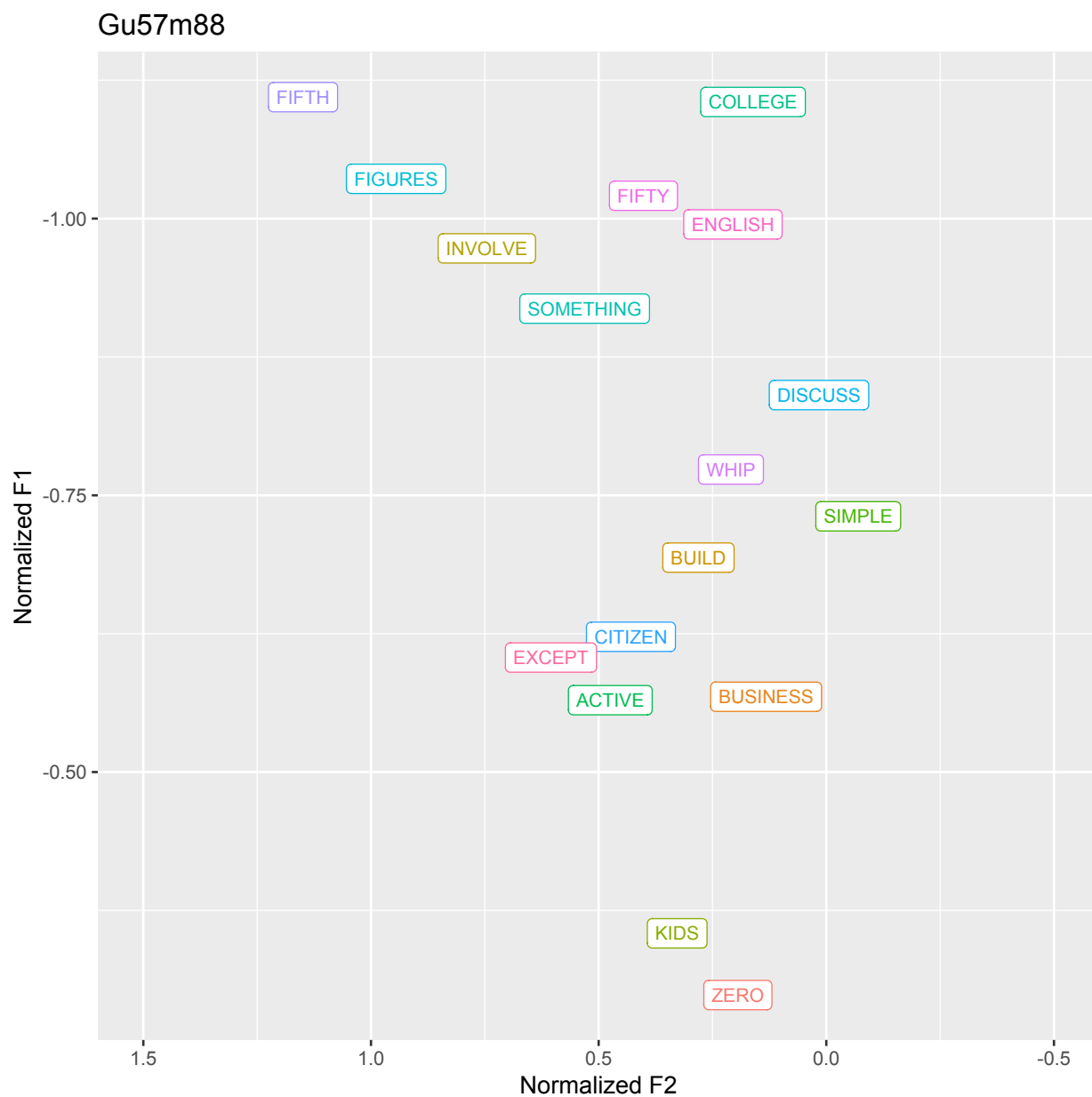


Figure 62 - Normalized vowel mean position for individual phonological environments, in a representative older male speaker. Each example word represents a different phonological environment. (Speaker code: Gu57m88)

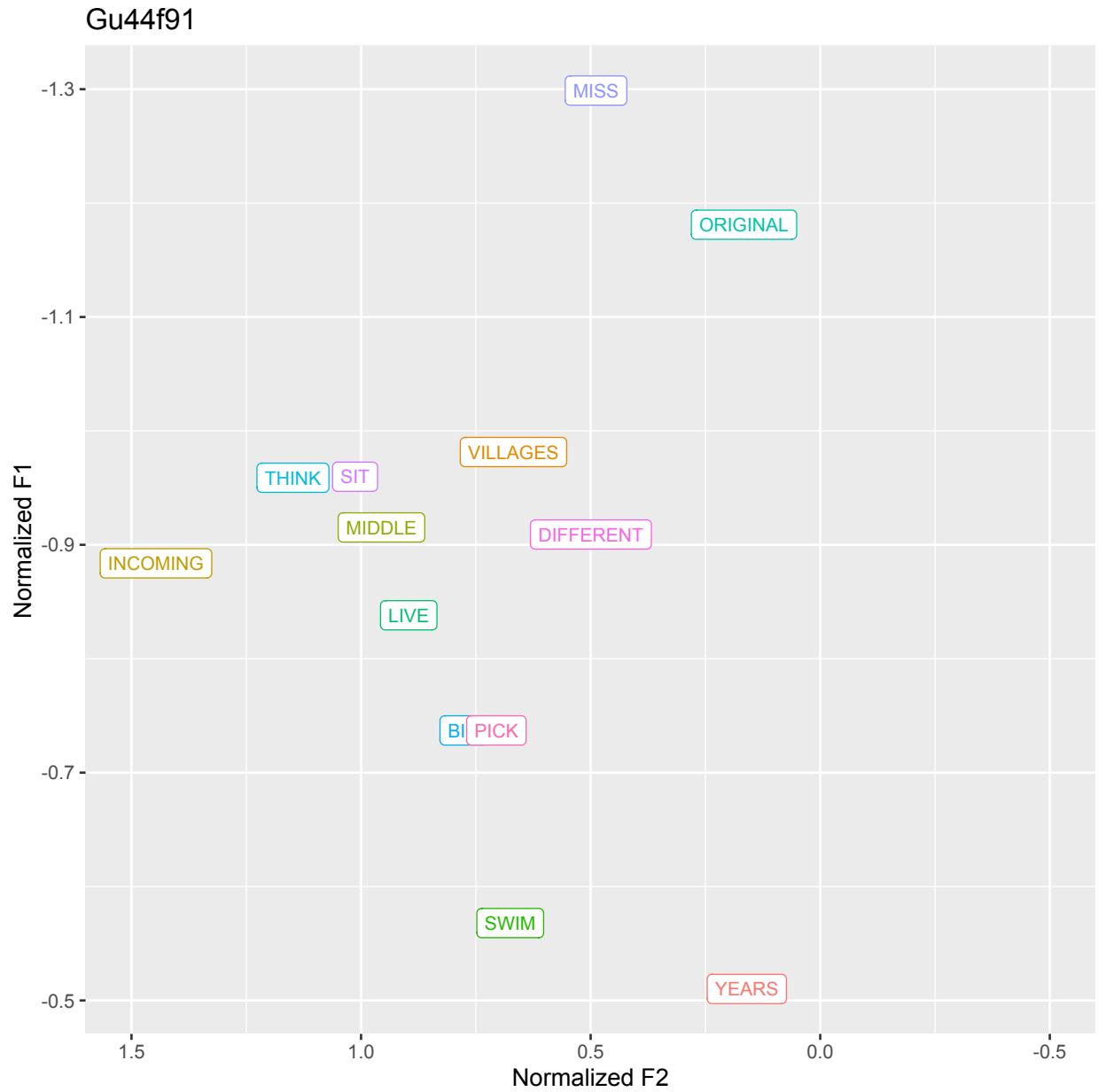


Figure 63 - Normalized vowel mean position for individual phonological environments, in a representative older female speaker. Each example word represents a different phonological environment. (Speaker code: Gu44f91)

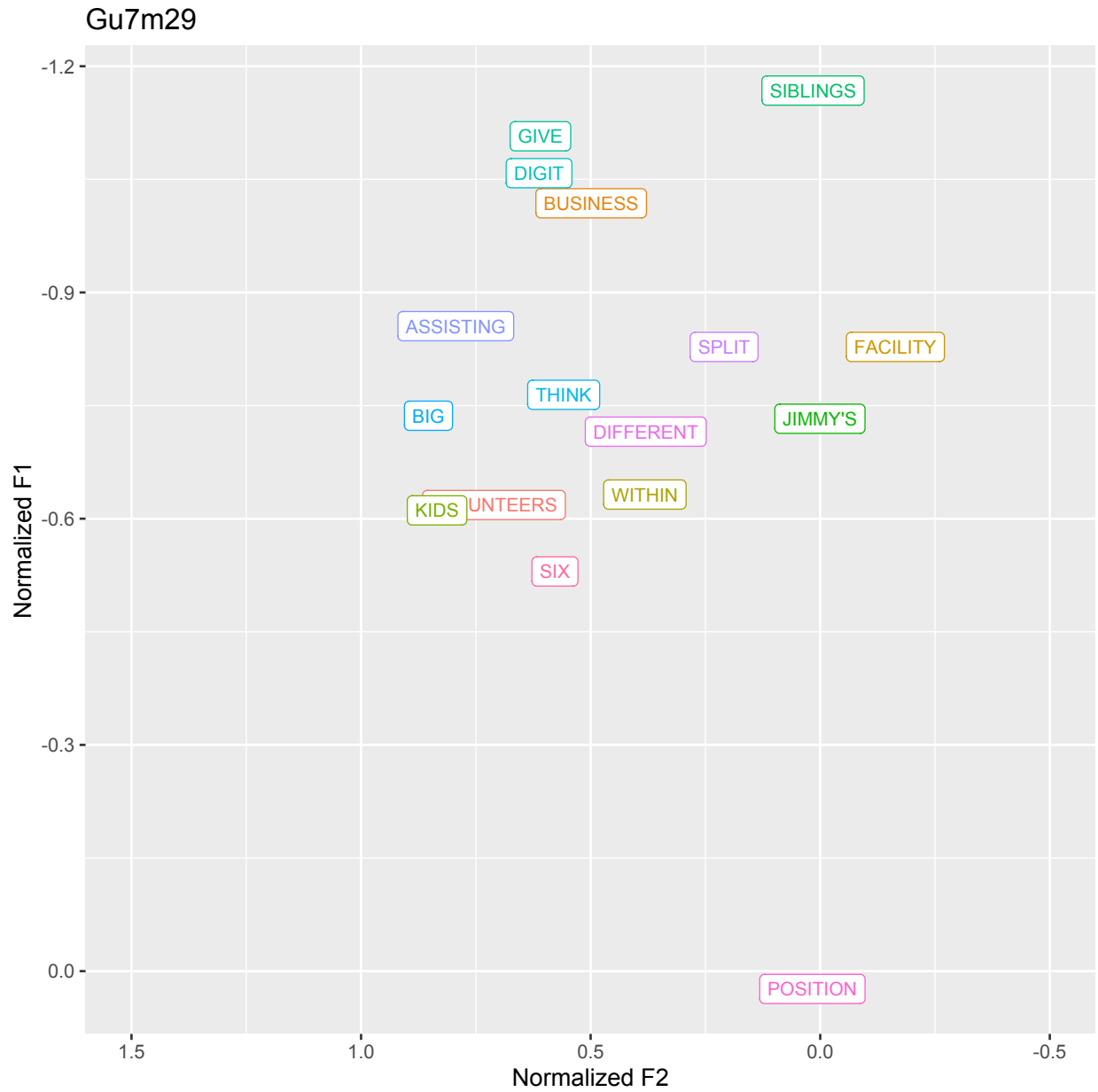


Figure 64 - Normalized vowel mean position for individual phonological environments, in a representative younger male speaker. Each example word represents a different phonological environment. (Speaker code: Gu7m29)

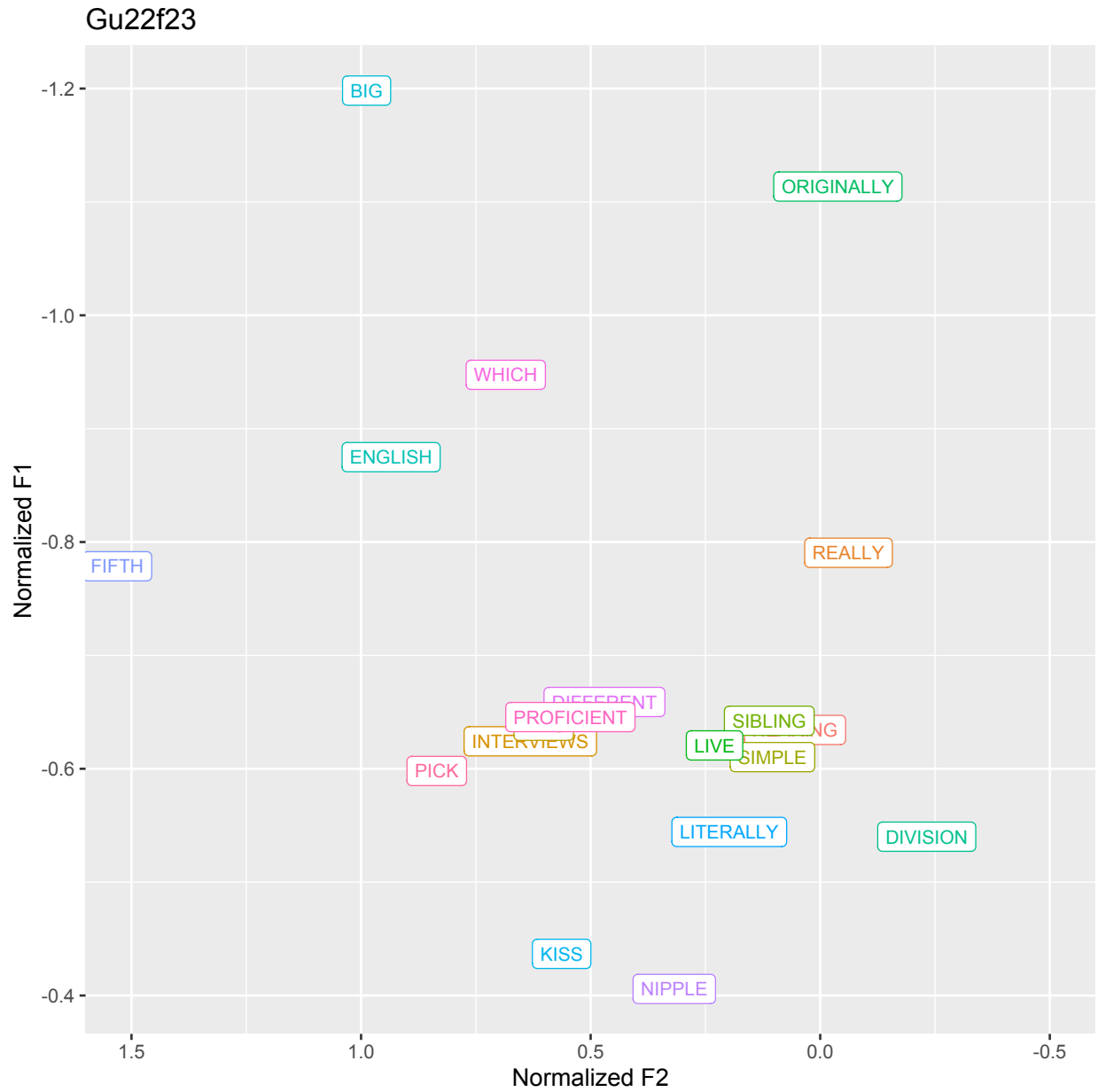


Figure 65 - Normalized vowel mean position for individual phonological environments, in a representative younger female speaker. Each example word represents a different phonological environment. Note the high, front production of KIT before voiced velar stops. (Speaker code: Gu22f23)

5.2.5 FLEECE

A total of 8240 tokens of FLEECE were included in the analysis, with a mean of 206 tokens per speaker. The analysis suggests a potential influence of the social factor *sex* having an influence on the vowel position, with males producing the vowel lower than females. However, this result needs to be interpreted with care, as the p-values only just approach significance. There is variation among the speakers with no clear pattern, as illustrated in fig 67, but one noticeable difference appears to be between the oldest speakers, aged 75 and older, and the generation born only a few years later. Furthermore, fig 67, showing the speakers' mean of the normalized F1 and F2 values (female speakers are marked in red, male speakers in green for better visualization), shows no clear indication of gender patterns, suggesting that these results need to be interpreted tentatively. Four male speakers can be found in outlier positions distributed relatively widely across the vowel space, which does not allow for a clear interpretation.

The phonological environment significantly influences the position of the vowel in a rather variable way: out of the 20 analyzed environments, 12 have a statistically significant influence, 8 of which show p-values below 0.001. As the vowel position varies in so many of the analyzed phonological environments, a closer look at a reoccurring pattern is difficult. Rather, the vowel production simply appears variable across the board.

Table. 14 shows the statistical model used for the analysis of the vowel position and its dependence on the social factors *sex*, *age*, *level of education* and *phonological environment*.

Vowel	Age	Sex	Interaction	Level of	Phonological	(Intercept)
FLEECE		(male)	Age*Sex (male)	Education	Environment	
				(higher)		
coefficient	-4.534e ⁻⁰³	-3.536e ⁻⁰¹	7.410e ⁻⁰³	3.463e ⁻⁰²	n/a	2.395e ⁺⁰⁰
p<0.05	--	0.044		--	<2e-16	<2e-16
		*			***	***

Table 14 - Model of FLEECE vowel position and its dependence on the social factors *age*, *sex*, the interaction of age and sex, as well as *level of education* and *phonological environment*.

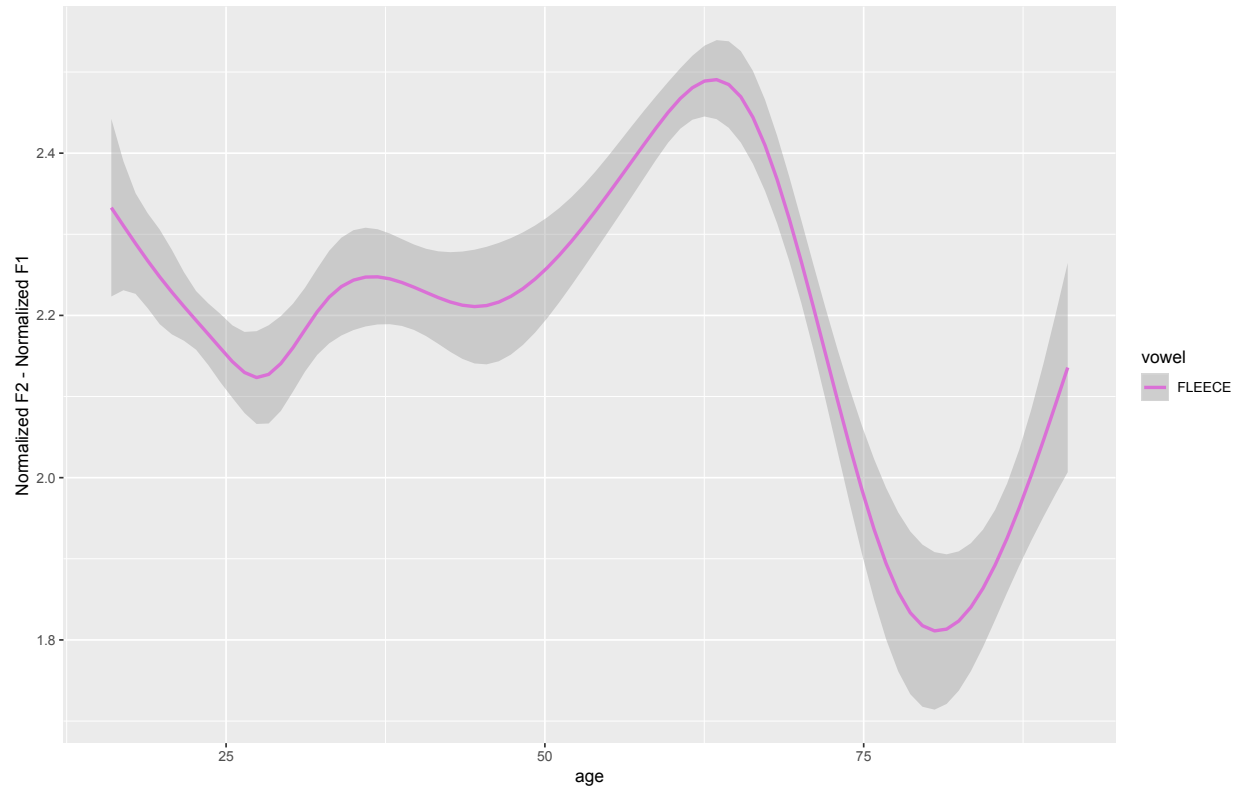


Figure 66 - Change over time for the vowel FLEECE, showing a significant change in vowel production between the oldest segment of the data and the generation born right after.

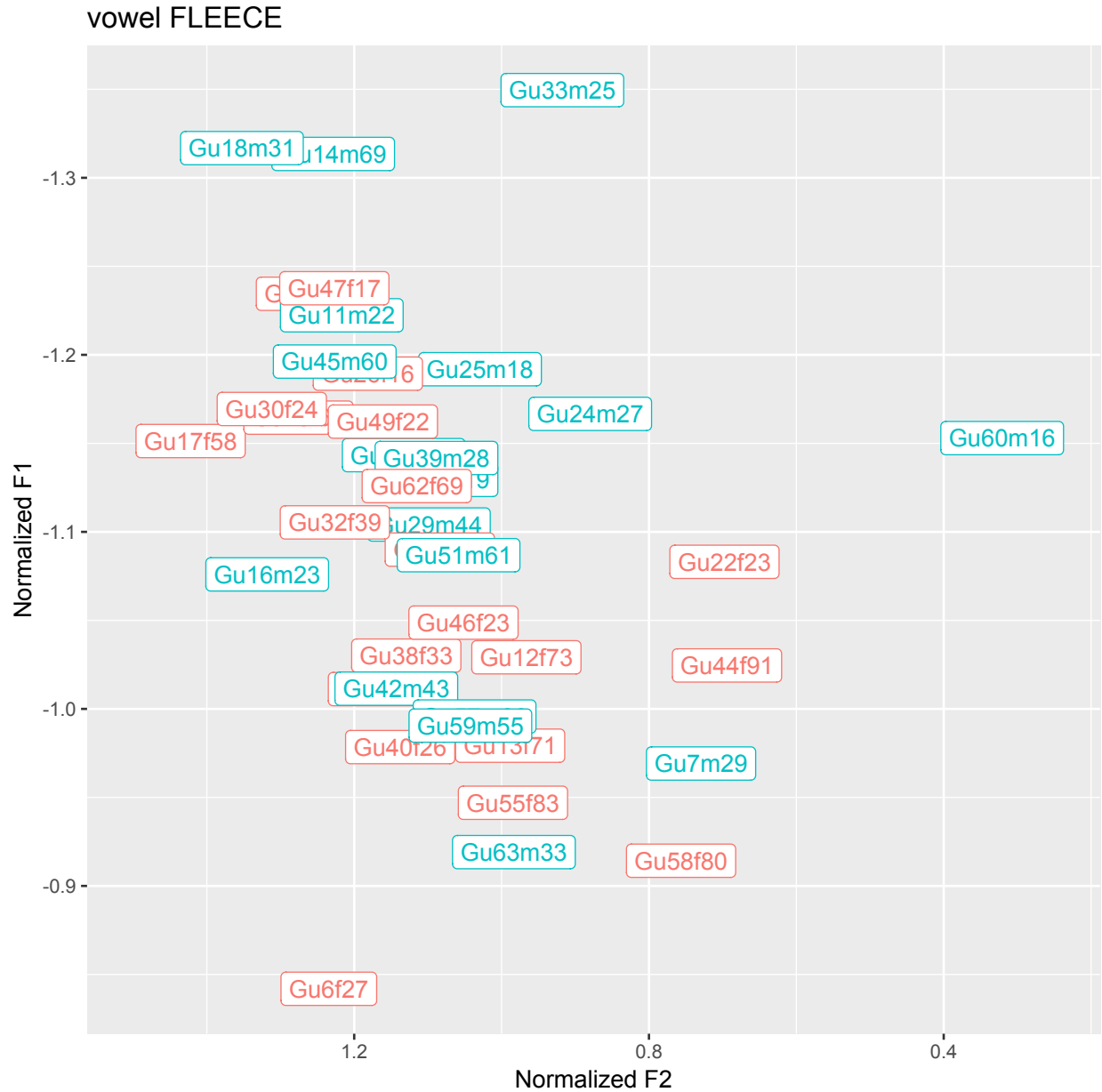


Figure 67 - Speakers normalized mean F1 and F2 values, categorized by sex shows a relatively even distribution, i.e. no clear influence on the vowel position according to this social factor, despite the significance found in the statistical model. Male speakers are labelled in blue, female speakers are labelled in red.

As discussed above, the position of FLEECE in the vowel space is variable depending on many of the analyzed phonological environments, which makes the discussion of individual phonological environments obsolete. The four representative speakers plotted in the following section illustrate that variability. There appear to be some outliers, such as the vowel production before a voiceless labiodental fricative (e.g. in the word “before”) in a representative older male speaker (fig. 68); or

before a voiced apical fricative (e.g. in the word “these”) in a representative older female speaker (fig. 69). In a representative younger female speaker (fig. 71), the vowel appears to be in a notably low and back position before a voiced apical central environment (e.g. in the word “year”).

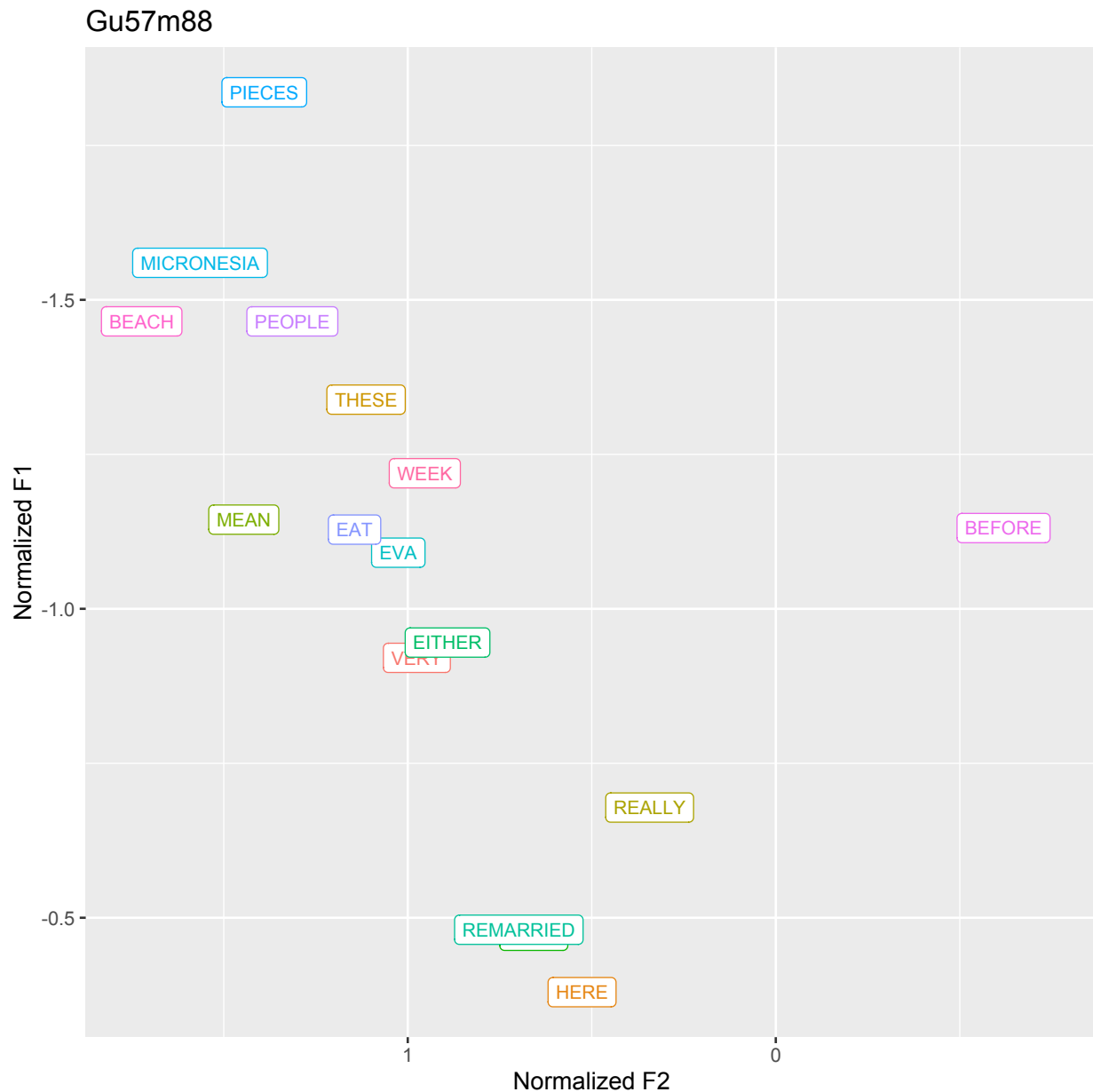


Figure 68 - Normalized vowel mean position for individual phonological environments, in a representative older male speaker. Each example word represents a different phonological environment. Note that some of the words presented in the plot may have been wrongly allocated to the vowel FLEECE, which is one shortcoming of automated vowel analysis (c.f. *section 4.3.3.1.3 - The Benefits and Limitations of FAVE*). The word “before”, for example, may have been produced with a schwa, which would explain its back position in the vowel plot compared to other environments. As there were over 8000 analyzed tokens for this vowel, individual misallocations, however, should not affect the overall results. (Speaker code: Gu57m88)

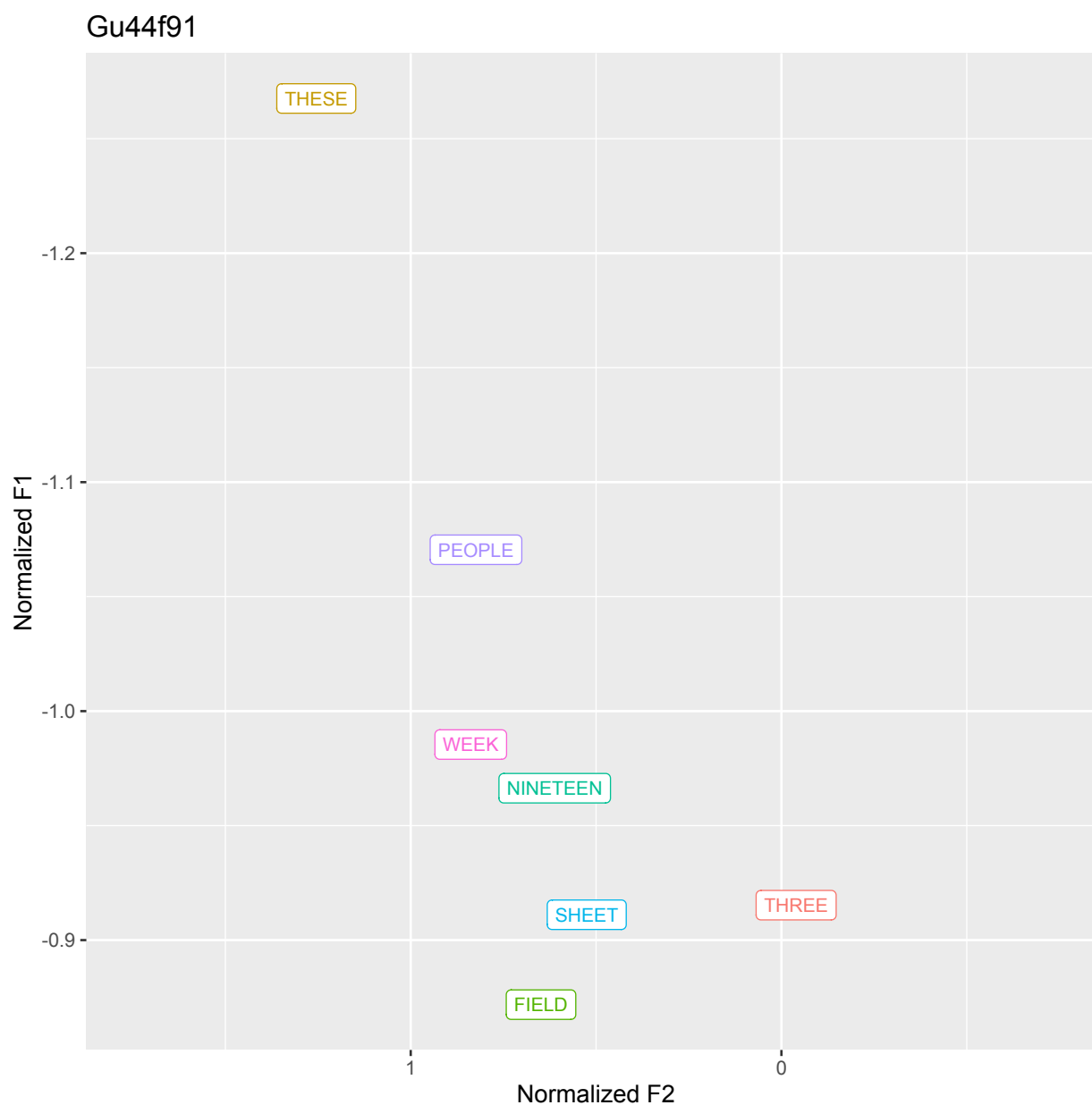


Figure 69 - Normalized vowel mean position for individual phonological environments, in a representative older female speaker. Each example word represents a different phonological environment. Note the high, front position of the vowel before a voiced apical fricative (e.g. in the word “these”). (Speaker code: Gu44f91)

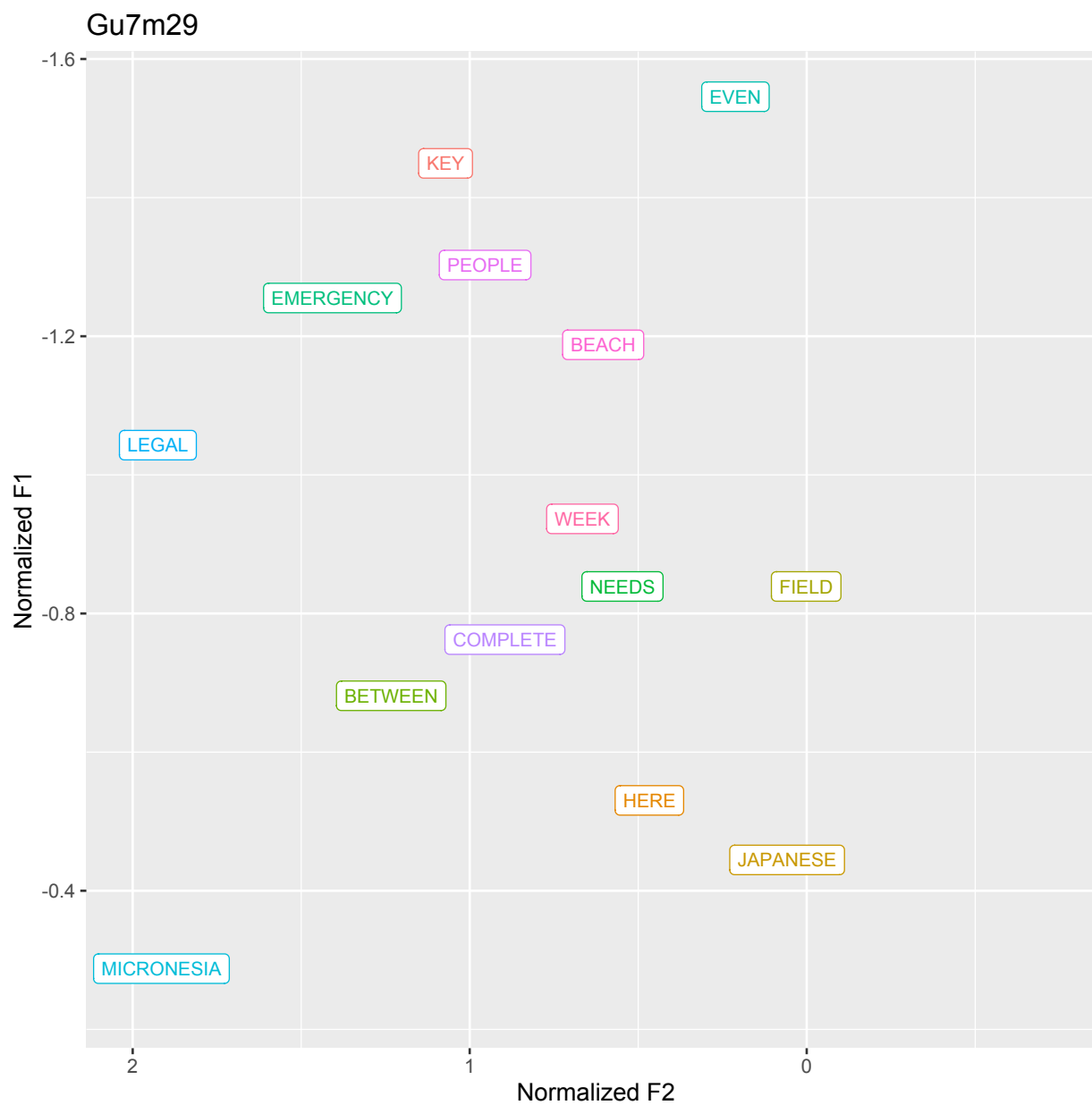


Figure 70 - Normalized vowel mean position for individual phonological environments in a representative younger male speaker. Each example word represents a different phonological environment. (Speaker code: Gu7m29)

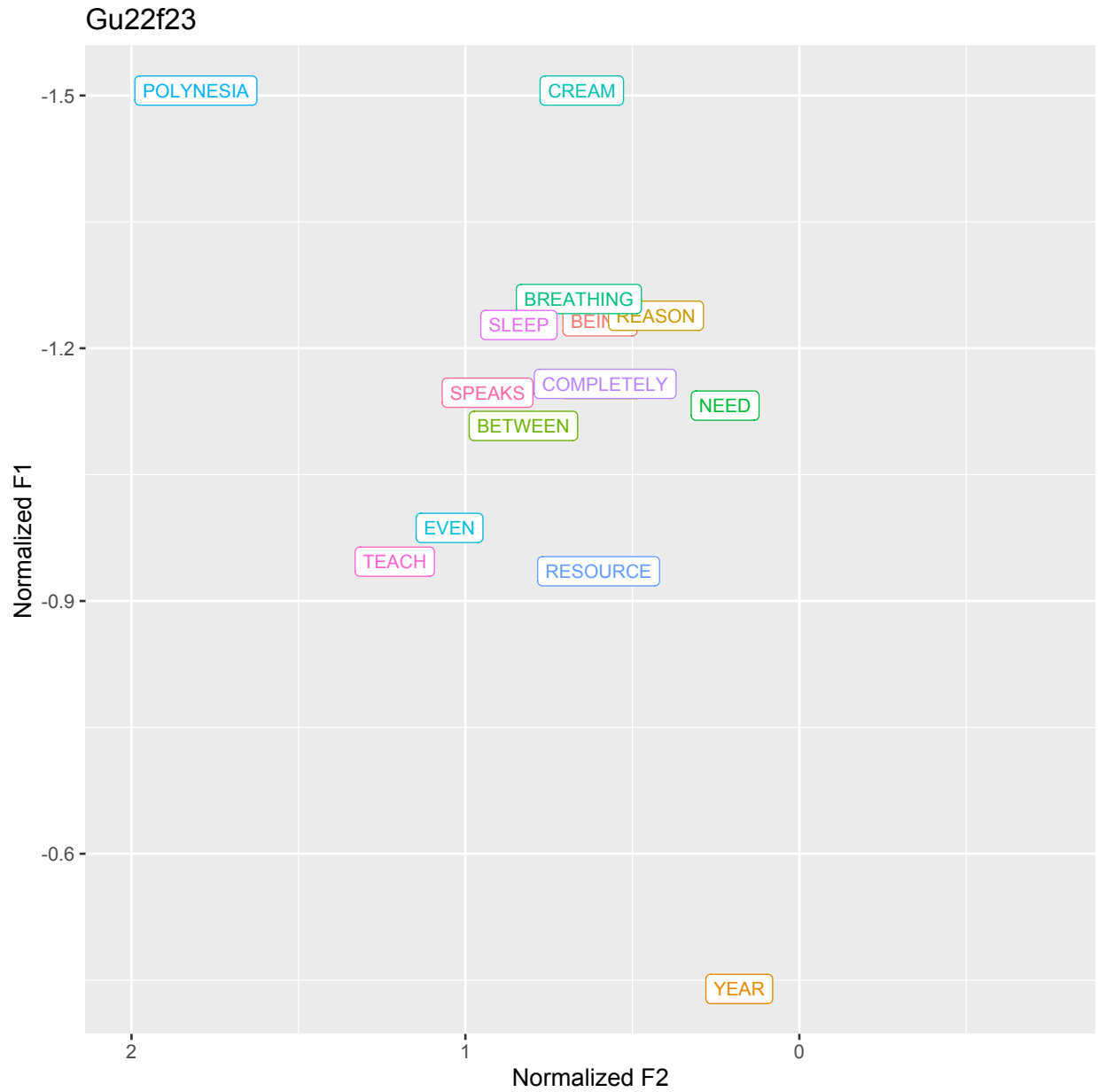


Figure 71 - Normalized vowel mean position for individual phonological environments in a representative younger female speaker. Each example word represents a different phonological environment. Note the low, back production of the vowel before a voiced apical central (e.g. in the word “year”). (Speaker code: Gu22f23)

5.2.6 FACE

A total of 7176 tokens of FACE were included in the final analysis, with a mean of 179.4 tokens per speaker. The results show that the vowel production of FACE is highly significantly dependent on the social factor *age*, with younger speakers producing a more raised and fronted nucleus compared to older speakers. Fig. 73 visualizes this finding quite clearly, showing the change over time happening in the pronunciation of FACE. The values clearly dip in older speakers. Similarly, fig. 72 shows that younger speakers (labelled in black) form a group in the higher and more raised vowel position than the older speakers (labelled in grey), indicating a raising of the vowel in apparent time. However, it is important to keep in mind that though FACE is not diphthongized in many American English dialects as well as in Chamorro, it is possible that younger speakers were producing a somewhat diphthongized vowel with a raised glide. The more raised values of FACE in younger speakers could therefore either hint at a more raised monophthong or a possible diphthongization of this vowel in apparent time. In the analysis, FACE was treated as a monophthong, and only its vowel midpoint was measured. This needs to be kept in mind when interpreting the results for this vowel position analysis. Auditory analysis suggests that the vowel remains monophthongized in younger speakers. As the vowel was only used as a reference point in a central position of the vowel plot to better indicate the changing positions of the short front vowels, its developmental patterns are not further explored in terms of social meaning.

Furthermore, the vowel position proves to be significantly influenced by its phonological environment. 15 out of 19 analyzed environments show a significant influence, indicating that there is a variable production in almost all environments. Figs 74-77 illustrate this finding, as the vowel position varies in the different phonological environments, but there is no clear pattern.

Vowel FACE	Age	Sex (male)	Interaction Age*Sex (male)	Level of Education (higher)	Phonological Environment	(Intercept)
coefficient	-7.861e ⁻⁰³	-1.664e ⁻⁰¹	3.515e ⁻⁰³	2.225e ⁻⁰²	3.515e ⁻⁰³	1.702e ⁺⁰⁰
p<0.05	3.379e ⁻⁰⁵ ***	--	--	--	<2.2e ⁻¹⁶	<2e-16 ***

Table 15 - Model of FACE vowel position and its dependence on the social factors *age*, *sex*, the interaction of age and sex, as well as *level of education*.

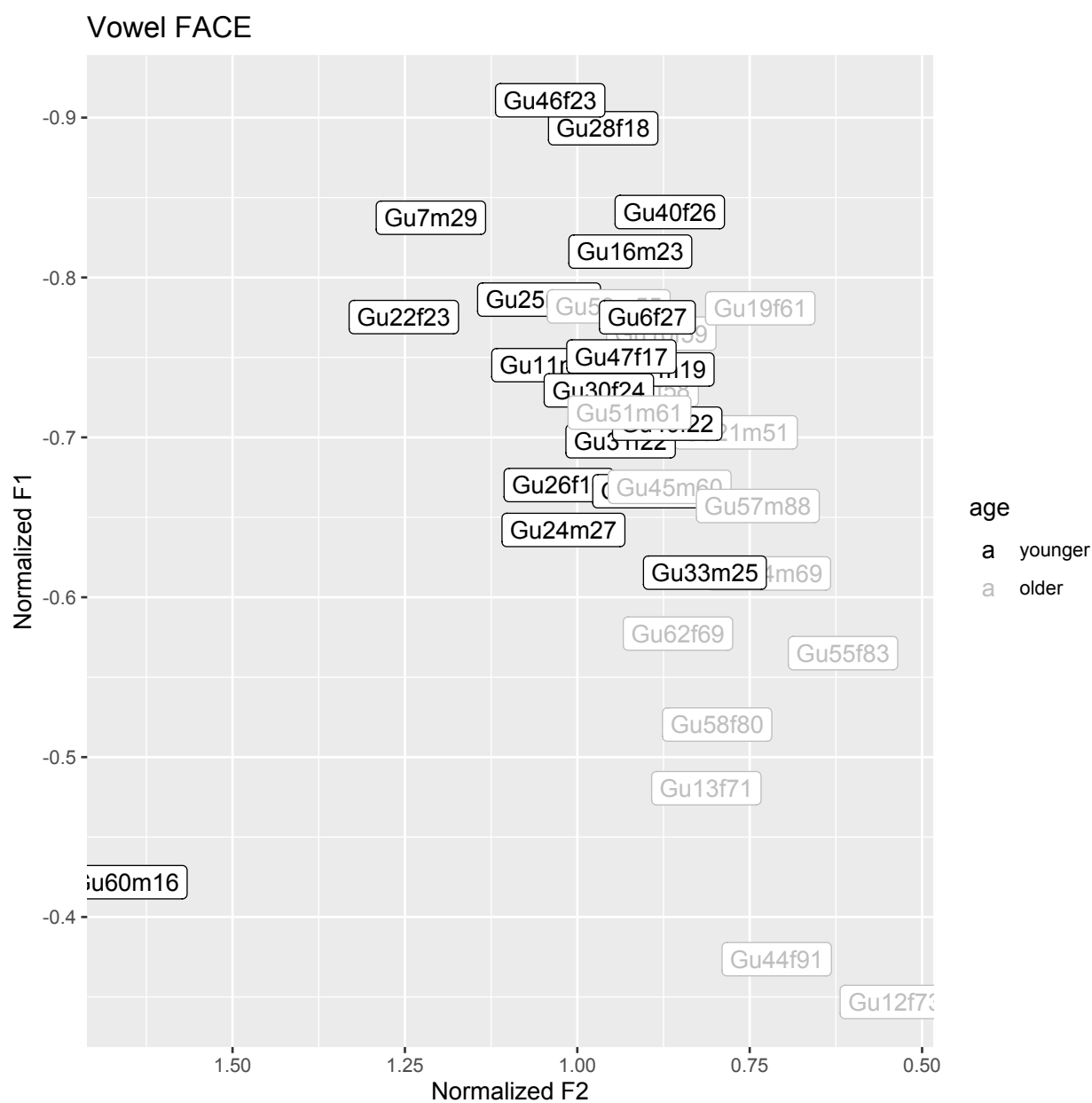


Figure 72 - Speakers' normalized mean F1 and F2 values, categorized by age. A cluster of younger speakers in a high front position indicates raising of the vowel in apparent time.

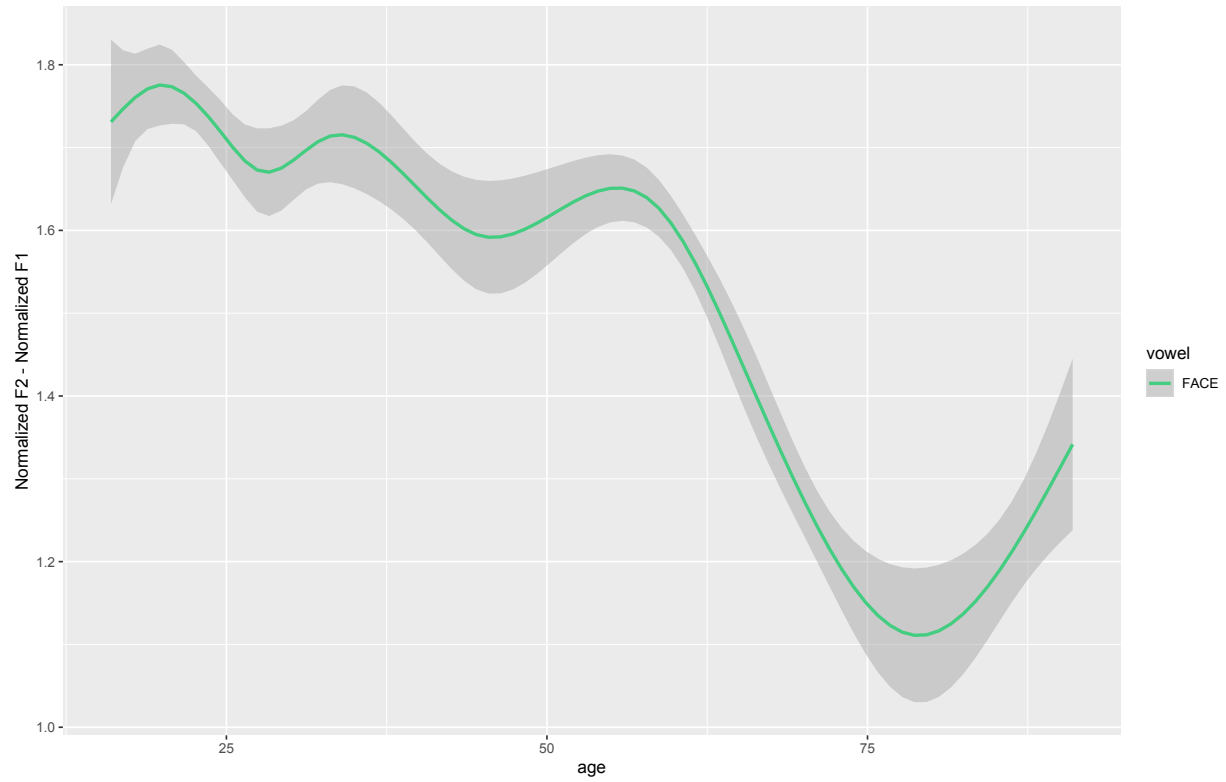


Figure 73 - Change over time for the vowel FACE. Younger speakers show a higher and fronter position of the vowel than older speakers.

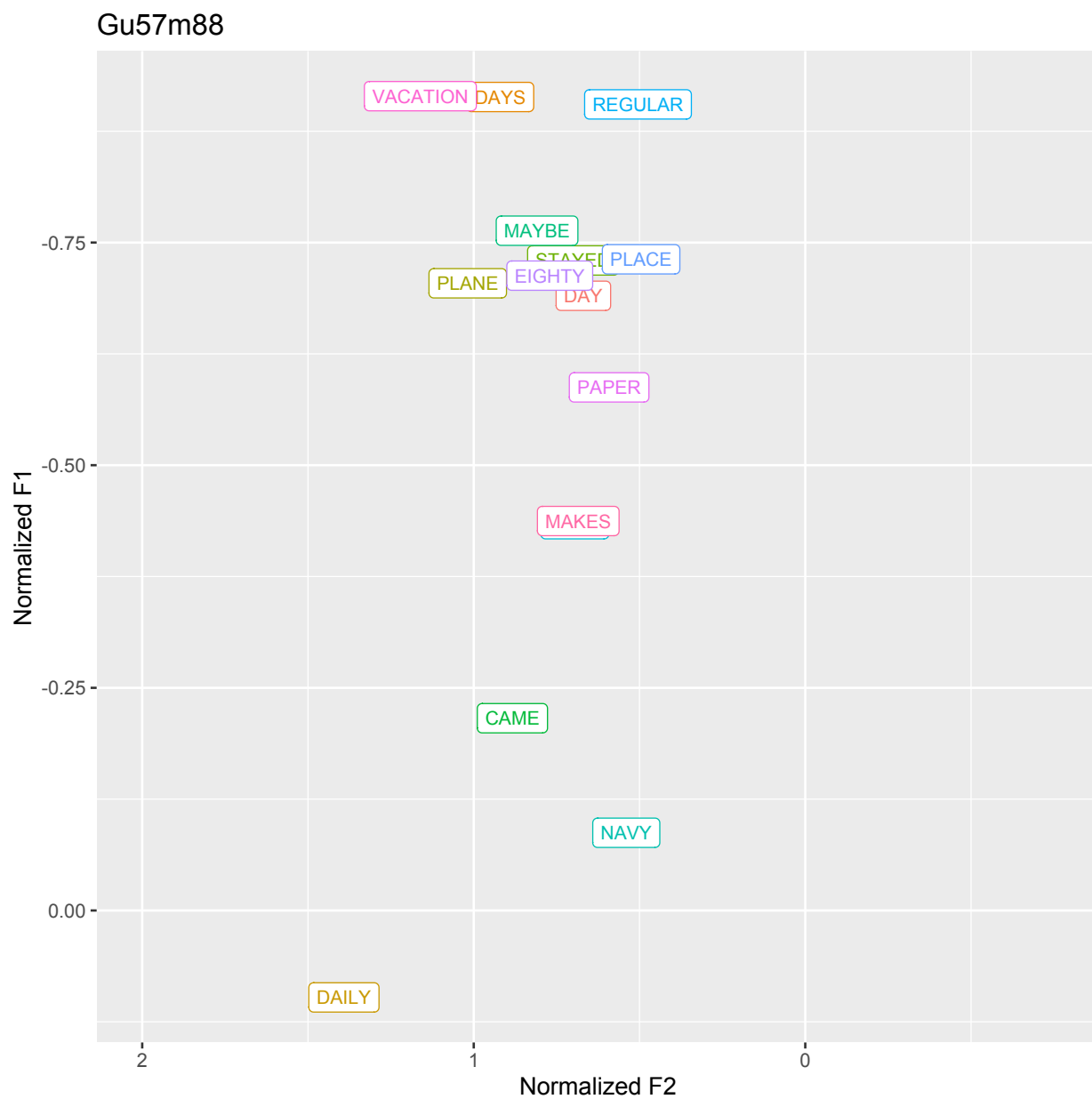


Figure 74 - Normalized vowel mean position for individual phonological environments in a representative older male speaker. Each example word represents a different phonological environment. (Speaker code: Gu57m88)

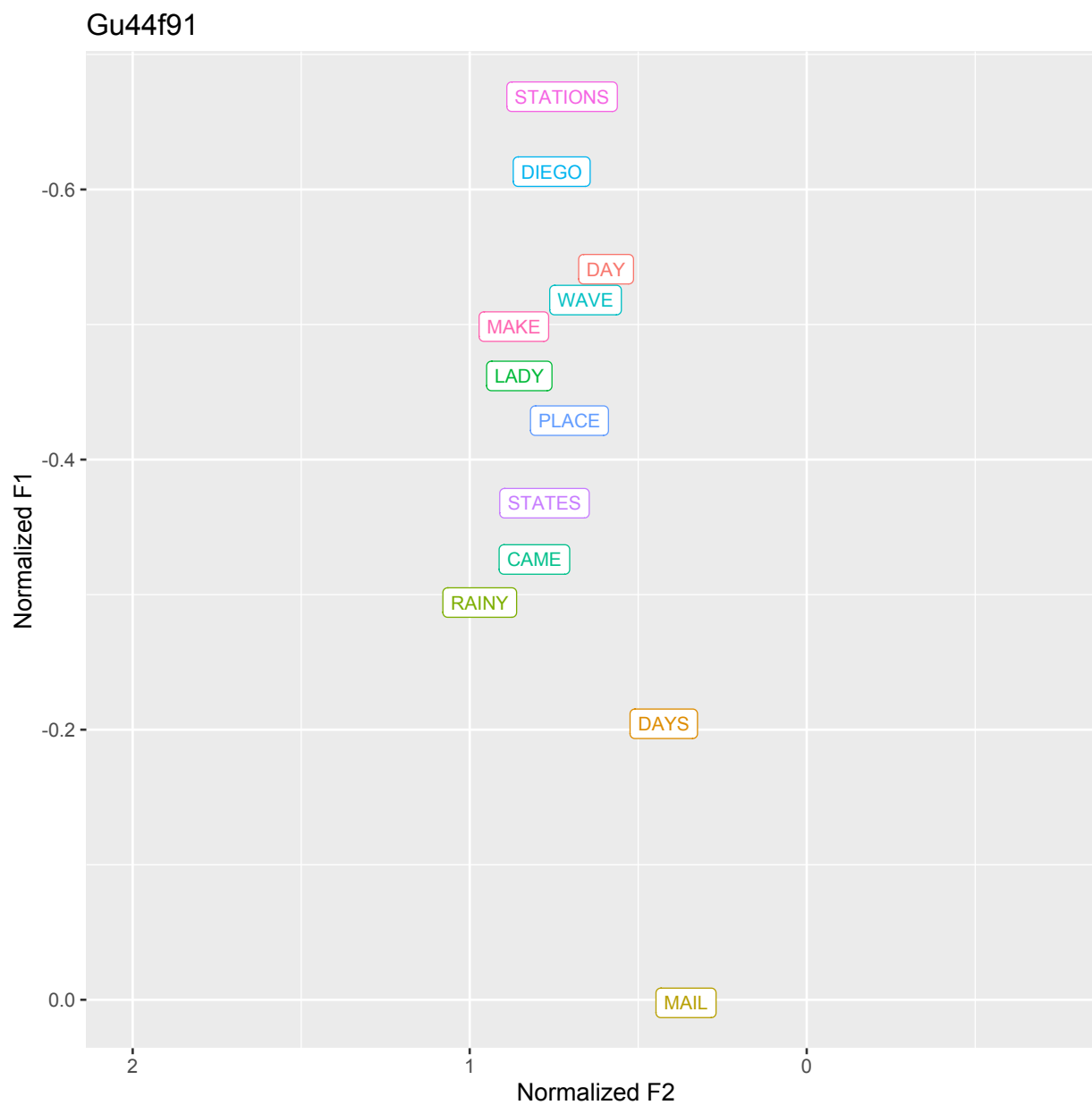


Figure 75 - Normalized vowel mean position for individual phonological environments in a representative older female speaker. Each example word represents a different phonological environment. (Speaker code: Gu44m91)

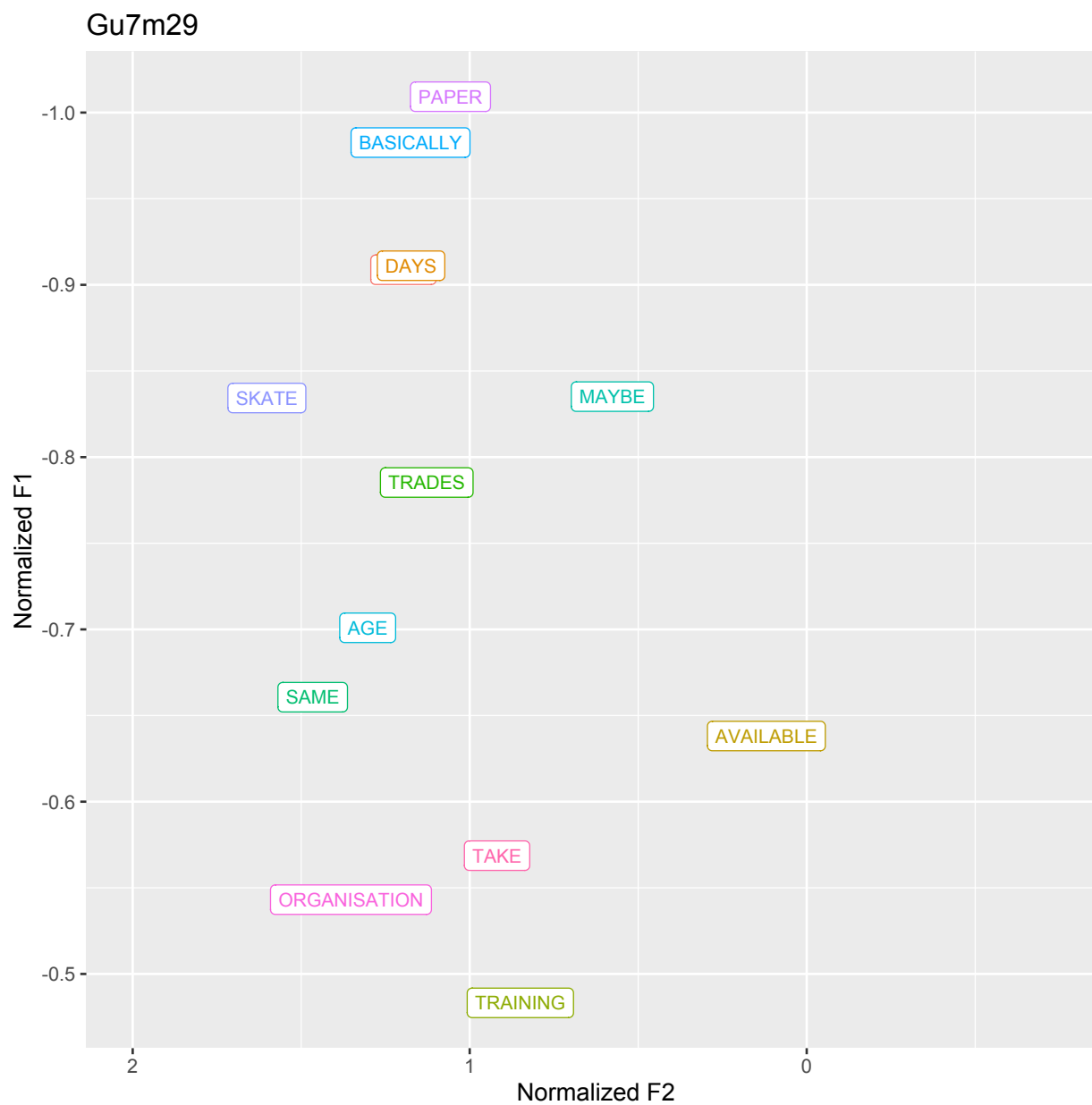


Figure 76 - Normalized vowel mean position for individual phonological environments in a representative younger male speaker. Each example word represents a different phonological environment. (Speaker code: Gu7m29)

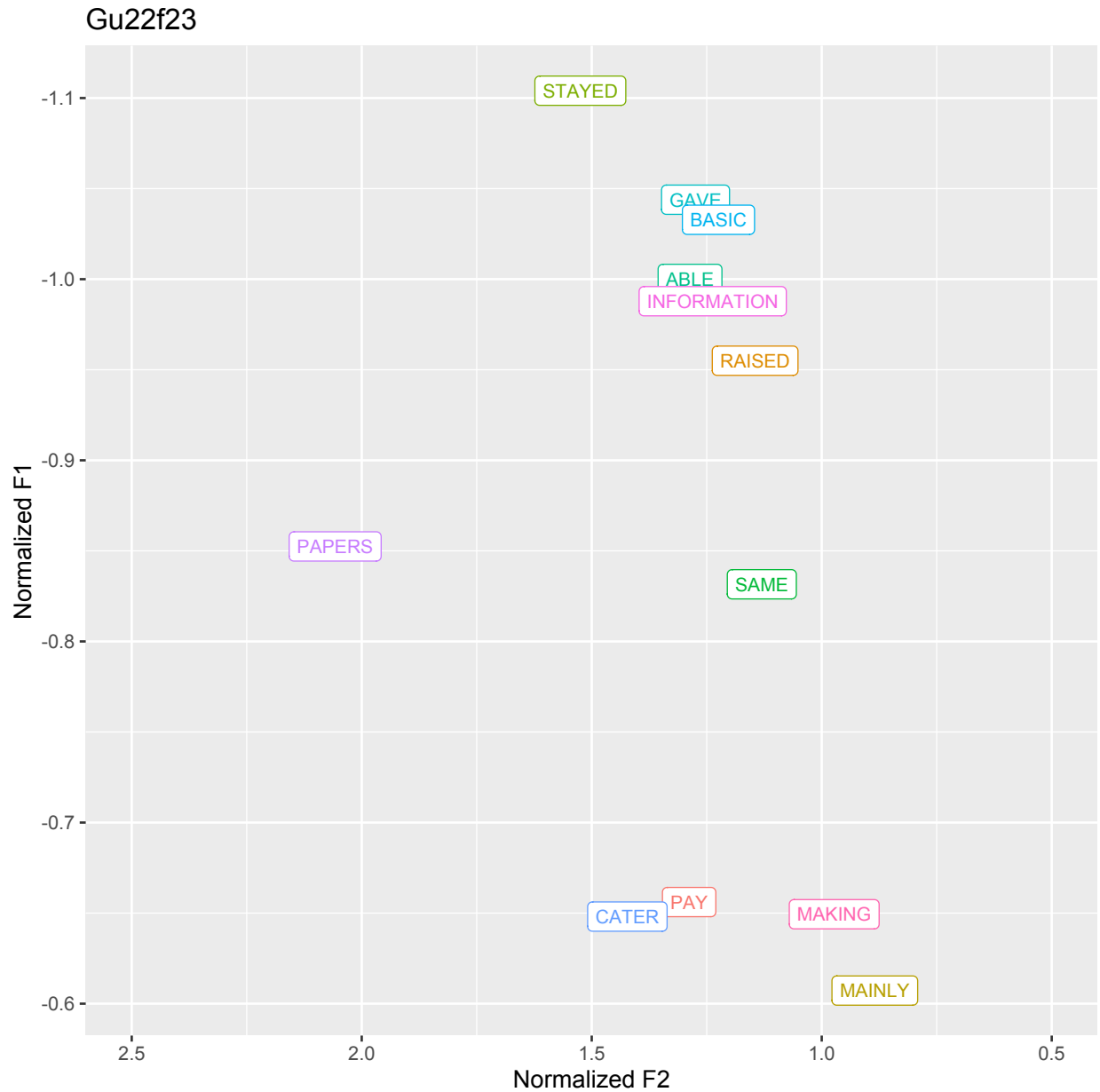


Figure 77 - Normalized vowel mean position for individual phonological environments in a representative younger female speaker. Each example word represents a different phonological environment. Note that there appear to be two clusters of vowel positions for this speaker, plus two outlier positions. One cluster is positioned high in the vowel plot (example words “raised”, “information”, “able”, “basic”, “gave”, “stayed”) and one slightly lower in comparison (example words “mainly”, “making”, “cater”, “pay”). The vowel production before voiceless labial stops (e.g. in the word “papers”) and voiced labial nasals (e.g. in the word “same”) appears to be somewhere in between. (Speaker code: Gu22f23)

5.2.7 *Summary and Interpretation*

The analysis of the short front vowels KIT, DRESS and TRAP, as well as their reference vowels FLEECE and FACE corroborate the impressions stated in the overall description of Guam English: The variety shows significant generational differences. The most significant social factor to influence changes in the short front vowels KIT and DRESS and the reference vowel FACE is *age*, suggesting retraction for both short front vowels in apparent time and a potential forward and upward in FACE. TRAP appears to remain in its low back position but shows some age-related variation in terms of vowel production in pre-nasal as opposed to pre-oral environments. There is an additional potential influence of the social factor *sex* affecting the production of DRESS and FLEECE, though results for this factor only just reach the level of significance and therefore can only be interpreted tentatively. The production of all five of the analyzed vowels is significantly dependent on the phonological environment they occur in, but most often, it is not one specific environment that causes a dramatically different production. Rather, many of the various environments seem to be affecting the vowel production. The changes found in the reference vowel FACE need to be interpreted with care, as the vowel may either be raised in younger speakers in the form of a monophthong or it may be slightly more diphthongized, suggesting a raised glide of the vowel. Though the speakers' level of education was analyzed as a potentially influential social factor on all five vowels, it did not prove to be significantly determining the vowel position.

What is particularly striking in the apparent time developments of the short front vowels is that there is a noticeable difference between the very oldest segment of the dataset, the Manâmkö', and the rest of the Chamorro speakers. Particularly the difference between the pre- and post-WWII generation is striking. This generational difference coincides with the time that Guam's inhabitants most likely switched from speaking Chamorro as an L1, to speaking English (almost) exclusively, which Kuper (2014) theorizes to be due to two main reasons. For one, Chamorros reportedly showed favorable attitudes towards the returning colonizers, as the Americans during that time period were celebrated for liberating Guam's locals from war times, even if, perhaps, the colonizer's political intentions were not entirely motivated by humanitarian ideals and rather by political strategy. Secondly, young women, i.e. the primary caregivers of the next generations, entered the workforce around this time, and English was used almost exclusively at work. This means that they were surrounded by the English language both during their education (lessons

were taught in English) as well as at work. Consequently, they were more likely to raise their children in English, as this was now their primary language.

What the results presented in this section additionally show is that the apparent time short front vowel changes happening in Guam English are not unlike certain language changes happening in the U.S. They are particularly similar to the changes reported for California, where the California Vowel Shift also includes a retraction of KIT and DRESS, in addition to a retraction of TRAP (with the exception of pre-nasal environments). The generally low and centralized production of TRAP in most generations of Chamorro speakers would therefore also not be unlike what is found in California. While Caucasian California English speakers generally produce a rather fronted TRAP in pre-nasal environments, other ethnic groups, such as Chicanos (Eckert, 2008), Korean Americans, Chinese Americans or Native Americans in California (Cheng, Faytak, and Cychosz, 2016) do not. Instead, the production is low and back in all phonological environments. This is similar to the Chamorro vowel production, even though a slightly raised and fronted production in pre-nasal environments was noted, particularly in the early post-WWII generations. A linguistic connection between Guam and ethnic Californians would not be surprising. The social connections between the island and this Western state are relatively close. The largest Chamorro diaspora community lives in California, mobility to and from California is frequent and family ties to this state are common.

The short front vowel production found in younger Guam English speakers is not exclusive to the island and the U.S. mainland. In other English varieties, similar productions have been reported. KIT, for example, is produced low and close to DRESS in Bequia English, a variety found in the Eastern Caribbean (e.g. *miracle* [mɛrəkl]) (Walker and Meyerhoff, 2015). The California Vowel Shift is also happening in Canadian English (Clarke, Ford, and Amani, 1995) (though opposite developments have been reported for Canadian Newfoundland and Labrador English, Clarke, 2010). Hawai'i English also shows a retraction of KIT, DRESS and TRAP (Drager, Kirtley, Grama, and Simpson, 2013). However, it is the close social connection to the U.S. and in particular to California that makes an alignment to this variety, as opposed to any other more probable. The potential alignment of Guam English to a regional, ethnic variety of American English will be explored further in the Discussion and Conclusion chapter of this thesis, where both results from the short front vowel analysis as well the rest of the linguistic profile of Guam English will be interpreted in light of a potential assimilation to an American target variety.

5.3 Part Three - Case Studies

In this section, I present a closer look at some of the variation found in Guam English, in the form of four case studies; two young male Chamorros, representing the basilectal and acrolectal speech styles that are common on the island, as well as a young Filipino and a young Caucasian male. So far, the focus of this dissertation has been on describing Guam English as a whole, pointing out features that a majority of the community shares and developmental patterns that the variety may go through. In doing that, I have put less of a focus on possible variation that can occur within this English variety, i.e. less focus on the individual. Though the results of the short front vowel analysis mainly show generational differences, one needs to keep in mind that every age group shows a considerable amount of inter-speaker variation as well. A closer look at four speakers of the same age and gender ought to give the reader a better idea of the range of variation that is possible in Guam English and the social factors that may contribute to this. *Jack* (speaker code: Gu39m28) represents a basilectal young male Chamorro speaker, who employs a vernacular that is locally referred to as a “Chaud”. *Eric* (speaker code: Gu16m23) belongs to a more standardized, highly-educated, acrolectal group of Guam English speakers. *Kyle* (speaker code: Gu80m28) is a Caucasian male who was born and raised on the island, but has a recent family history that traces back to the mainland U.S. Finally, *Seth* (speaker code: Gu86m19) grew up in a Filipino household on Guam. The four male speakers were chosen as they are representative of the various speech patterns found in Guam English, which likely occur due to a wide range of influential social factors. They represent three main ethnic groups on the island and a spectrum between high and low education. The linguistic focus in describing these four speakers will be put both on a general overview of their speech patterns, addressing similar language aspects as found in *Chapter 4 – Results, Part 1*, as well as on the short front vowel production, similar to *Chapter 4 – Results, Part 2*.

5.3.1 Jack

Jack, a basilectal young Chamorro speaker, employs a more vernacular form of Guam English that is not well-represented in the corpus, as he was one of the few participants that did not appear to produce a slightly more standardized speech during the interview. His variety is locally referred to as a “Chaud accent.” It is defined and linguistically described in more detail in Quan (2010), where

she refers to it as Guam's Colloquial Chamorro English. She states that it is largely spoken by Chamorros and "locals" and apart from being considered provincial, it is generally not negatively stigmatized.

Though many linguistic features of the Chaud accent are shared with older speakers that have Chamorro as a mother tongue, Chaud is not necessarily only associated with older people. It can be considered an in-group dialect that is also often spoken by younger, locally-oriented speakers. My impression during fieldwork was that the vernacular is more often spoken by males rather than females, though some of my participants reassured me that it is a common speech style for both genders and all ages: "it makes them sound kind of, err, chaud: men, women, children, yes, no, even ladies, girls, boys, yeah all over- even elders" (older female Chamorro, Gu17f58, born around 1958). Since this speech style was rarely used in interviews with me, it is difficult to draw any quantitative conclusions about which social groups are most prone to be on the basilectal, "Chaud" side.

Jack is a young male Chamorro (28 years old at the time of recording) with comparatively low education and zero mobility off-island: He has only completed primary education, which makes him the only participant in the short front vowel analysis database that has not completed a secondary education level. He comes from a troubled family background and has spent almost his entire adult life on probation, which is what prohibited him from leaving the island. He works as a mechanic in a local tire shop. He has moved around on the island quite a lot, but feels most at home in a village located in the center of the island. I conducted the sociolinguistic interview with this speaker at a local mayor's office where he was visiting his girlfriend who was employed there. The interview was held with him and a female Chamorro acquaintance of his at the same time. During the interview, the two participants were mostly speaking to each other about shared experiences of life in Guam and Guam's culture, which allowed me, the interviewer, to mainly take on the role of a listener. Conversation topics revolved around childhood memories, which were mostly positive but also involved memories of violence. The basilectal speaker I am focusing on in this case study shows a great amount of pride for his island and its culture, believing strongly in the spirit of the ancestors and the respect one ought to show to the elders of the community. The participant often mentioned his grandfather, "grandpa," whom he praised for being very active for his age and for being a typical "old-school" Chamorro. Both interview partners were noticeably open about their lives and the conversation was fluent and active.

5.3.2 *Eric*

In contrast, Eric represents a much more acrolectal counterpart. This young male Chamorro was also born and raised on the island and has never been to the U.S. mainland before. However, he has a much more education-centered background, with parents working in health care and education (though they do not hold an academic degree). He was educated in a Catholic private school, enjoys reading - especially poetry - and his best friends in school belonged to the top ten academic achievers. His career goal is to obtain a PhD off-island and to work in academia. At the time of the interview, he attended the local university. He had originally planned to study on the mainland, staying with his relatives in Washington, California or Virginia, but his family lacked the financial means to allow for an off-island education. During the interview, the speaker states that he has mixed feelings about the island's continuous Americanization, as he is worried about the loss of culture and the less-than ideal status of being a territory. However, he also appreciates the U.S. government for its economic support of the island. The conversation with this speaker further revolved around his educational and professional ambitions, his political views and stories about island culture. The analysis of this speaker is particularly interesting, as Eric not only employs a more acrolectal variety of Guam English, but in fact shows much linguistic similarity to a mainland American sociolect frequently associated with gay speech (see following sections for a more in-depth discussion of the linguistic features he employs that can be associated with gay speech).

5.3.3 *Kyle*

Kyle is a Caucasian speaker who was born and raised in Guam. His parents, whom he still lives with, had moved to the island when they were young adults. Kyle has not left Guam much, apart from visits to Michigan and Ohio every few years, which is where his parents are originally from. Additionally, he has spent a few weeks off island here and there for holidays, for example in Japan and Bali. Kyle completed his schooling on the island, where he attended public school in a provincial part of Guam. He also attended some college courses but did not complete his tertiary education. The majority of his classmates were Chamorro. He remembers his time at school, where Caucasians were a minority, as follows:

There were some people who ignored me, some people who tried not to notice the fact that I was White, some people who made friends with me and some people who, like, uh, sort of mostly subtly but definitely treated me differently. [...] Uh, it's- it's hard- it's hard for me to tell what was done because I was a White guy and what wasn't.

I feel like it's people like me's fault, yea, it's- it's me, coming here to this island and living here and them adopting cultural artifacts from my parents' and their- their parents' generation and so forth.

According to his own reflections, Kyle has been, for the most part, integrated in the Chamorro community and has good knowledge of the Chamorro language. He only sometimes felt singled out for being Caucasian. His closest friends, however, are White. He is also aware of the role that is assigned to (Caucasian) Americans, whose presence on the island is connected to the loss of the indigenous culture.

Conversational topics during the interview with Kyle, which was held at a local restaurant, revolved around his experience as a Caucasian growing up in a mainly Chamorro, rural community, his education and politics.

Despite the fact that Kyle grew up in a Chamorro community, his English resembles that of an American norm, with only very few exceptions.

5.3.4 Seth

Seth was born and raised in Guam and stayed on the island apart from a few weeks of vacation in California and Hong Kong. He was raised by his Filipino mother and grandmother, who lived in the same house. His grandmother came to Guam from the Philippines in the 1950s or 1960s to find work opportunities in retail. His mother was born in Guam. His father, whom he has never met, is Chamorro. Seth is therefore both Chamorro and Filipino, but he was raised solely by Filipinos. He states that whenever he is asked about his race, he will say that he is "Filipino Chamorro." During the interview, he reformulates his family's racial background several times, showing that he is not entirely sure which relatives are Filipino and which ones Chamorro ("oh shoot, you know, I'm so sorry, I think I mixed it up.") While older Filipino study participants frequently state that they were bullied for their race when growing up in Guam, and that they tried hard to blend in with the Chamorros, Seth belongs to the generation that feels part of the local community, including both

Chamorros and Filipinos. He states that he has never felt singled out for his race (“there was nothing negative to the point where it was discrimination or hate [...] we're all buddy buddy.”)

Seth grew up speaking English at home, but his grandmother occasionally spoke to him in her native language, Ilokano, and then translated her words into English so that he could understand her. He says that this has helped him learn “several terms” and “common swear words” of Ilokano, but not entire phrases. He knows very little Chamorro, and claims not to know much about Chamorro culture, as he was not required to take Chamorro classes in the private school he attended. At the time of the interview, Seth was in the process of completing his tertiary education with the goal of becoming an English teacher.

Seth employs very careful, eloquent speech. Whenever he mispronounces a word, or finds that the content of his statement is not entirely true, he carefully corrects himself (“oh, I’m sorry, I- let me rephrase that,” “but the burk, no, not the burk- but the *bulk* of her work”). He also carefully pronounces and elongates word-final consonants (*negative* [ˈnegəʔɪv]) and generally refrains from replacing them with schwa (*yes* [jes] as opposed to [jeə]). When playing his recording to a linguist with experience in researching Philippine English, her first impression was that his speech resembles that of a Filipino call center employee. This impression was likely formed based on this speaker’s rather standardized, American phonology and lexis⁵⁴. The Filipino word “Tagalog,” for example, is pronounced in an American variety, rather than Philippine English ([tʰəˈɡɑːləɡ] rather than [təˈɡaːləɡ]). Seth does not show any of the features found in older Filipinos on Guam, such as the trilled /r/, the production of TRAP as [ɑ], or the replacement of /f/ with /p/.

Though Seth grew up in a Filipino household, I was under the impression that his English is not significantly different from young Chamorro males of his age group and is most similar to Chamorro speakers on the acrolectal side of the spectrum. To mention only a few features, Seth employs a low, back pronunciation of TRAP in all phonological environments and monophthongal FACE and GOAT vowels. Regarding his own speech, Seth claims that he never felt that he needed to blend in, but rather, he was encouraged by his caregivers to speak “proper” English:

⁵⁴ The English variety expected in Philippine call centers is often standard American English (Lockwood, Forey, & Price, 2008)

They never raised me or my sister, ‘okay, you have to sound like them’ or ‘make sure you blend-’ it was nothing like that. It was always just ‘speak right’, in a sense that you’re speaking understandable and proper English, ‘cause that was the language that’s used. And always just ‘do good in your studies’ and that was it.

5.3.5 *Linguistic Overview*

Linguistically, the four speakers show great differences in some respects, but also a few similarities. Eric, Kyle and Seth all generally follow a much more standardized speech pattern and sometimes employ features that are associated with linguistic developments found in mainland American speakers. Examples of this would be the retracted production of DRESS⁵⁵, fronting of GOOSE⁵⁶, or the non-canonical production of /s/⁵⁷, mainly employed by Eric. Furthermore, those three speakers frequently employ discourse markers such as “like,” and “I guess,” which are also commonly found in (younger) American speakers. Jack, on the other hand, shows more non-standard features, such as the unaspirated production of /p, t, k/, th-stopping and fricativization, interchangeable use of past, present and future tense, as well as frequent use of Chamorro lexis. Kyle sets himself apart from the other two acrolectal speakers by his general lack of local features, apart from a slightly low, centralized variant of TRAP, which all four speakers share.

A more detailed account of the speakers’ linguistic profile is presented here, covering phonological, prosodic, morpho-syntactic and lexical features, but with a special focus on vowel production.

⁵⁵ Retraction of DRESS is a regional American feature found, for instance, in California English speakers (Eckert, 2008).

⁵⁶ GOOSE fronting is found, among many other English speaking regions, in California (Hall-Lew, 2011).

⁵⁷ non-canonical production of /s/ in American English is frequently associated with younger speakers and gay-speech (Mack and Munson, 2012). It is also occasionally referred to as a “gay lisp”.

5.3.5.1 Phonology

5.3.5.1.1 Vowels

<i>Lexical Set</i>	<i>Basilectal Chamorro Speaker, Jack</i>	<i>Acrolectal Chamorro Speaker, Eric</i>	<i>Acrolectal Caucasian Speaker, Kyle</i>	<i>Acrolectal Filipino (Chamorro) Speaker, Seth</i>
KIT	[ɪ] > [i]	[ɪ]	[ɪ]	[ɪ]
DRESS	[ɛ]	[ɛ] [ɛ̃]	[ɛ]	[ɛ]
TRAP	[a]	[a]	[a]	[a]
LOT	[ɔ] [ɔ̃] [ɔ̄] [a] [ɑ]	[ɔ] [ɔ̃] [ɔ̄] [a]	[ɔ] [ɔ̃] [ɔ̄] [a]	[a] > [ɔ] [ɔ̃] [ɔ̄]
STRUT	[ʌ] [ʌ̃]	[ʌ]	[ʌ]	[ʌ]
FOOT	[ʊ] [ö]	[ʊ] [ö]	[ʊ] > [ö]	[ʊ] [ö]
BATH	[a]	[a]	[a]	[a]
CLOTH	[ɔ] [ɔ̃] [ɔ̄] [a] [ɑ]	[ɔ] [ɔ̃] [ɔ̄] [a]	[ɔ] [ɔ̃] [ɔ̄] [a]	[a] > [ɔ] [ɔ̃] [ɔ̄]
NURSE	[ɜ̃]	[ɜ̃]	[ɜ̃]	[ɜ̃]
FLEECE	[i]	[i]	[i]	[i]
FACE	[eː]	[eː]	[eː] [ei]	[e]
PALM	[ɔ] [ɔ̃] [ɔ̄] [a] [ɑ]	[ɔ] [ɔ̃] [ɔ̄] [a]	[ɔ] [ɔ̃] [ɔ̄] [a]	[a] > [ɔ] [ɔ̃] [ɔ̄]
THOUGHT	[ɔ] [ɔ̃] [ɔ̄] [a] [ɑ]	[ɔ] [ɔ̃] [ɔ̄] [a]	[ɔ] [ɔ̃] [ɔ̄] [a]	[a] > [ɔ] [ɔ̃] [ɔ̄]
GOAT	[o] [ou]	[o]	[ou]	[o]
GOOSE	[u]	[u] [ü]	[u] [ü]	[u] [ü]
PRICE	[aɪ]	[aɪ]	[aɪ]	[aɪ]
CHOICE	[ɔɪ]	[ɔɪ]	[ɔɪ]	[ɔɪ]
MOUTH	[aʊ]	[aʊ]	[aʊ]	[aʊ]
NEAR	[iː]	[iː]	[iː]	[iː]
SQUARE	[ɛɪ]	[ɛɪ]	[ɛɪ]	[ɛɪ]
START	[ɑː]	[ɑː]	[ɑː]	[ɑː]
NORTH	[ɔ] [oː]	[ɔ] [oː]	[ɔ] [oː]	[ɔ] [oː]
FORCE	[ɔ] [oː]	[ɔ] [oː]	[ɔ] [oː]	[ɔ] [oː]
CURE	[ʊː]	[ʊː]	[ʊː]	[ʊː]
Happy	[i]	[i]	[i]	[i]
LETTER	[ɜ̃]	[ɜ̃]	[ɜ̃]	[ɜ̃]
commA	[ə]	[ə]	[ə]	[ə]

Table 16 - Summary of vowel production of four analyzed Guam English speakers, Jack, Eric, Kyle and Seth.

5.3.5.1.1.1 Jack's Vowel Production

The vowels of the basilectal Chamorro speaker generally follow an American English system (c.f. Table 9), but unlike the acrolectal speaker, he does not participate in some of the recent changes found in regional American Englishes (e.g. lowering of DRESS, fronting of GOOSE). For the vowels KIT, DRESS, TRAP, FLEECE and FACE, vowel plots are presented at the end of this section, along with plots that show their linguistic constraints. The plots illustrating the linguistic constraints are simplified to only five or six environment categories, namely nasal, stops, fricative, lateral, central and word-final. KIT is produced as [ɪ] (*give* [gɪv]) and is distinguishable from

FLEECE, which is produced as [i] in a noticeably high and front position, as auditory analysis suggests (*clean* [klin]). There is a considerable overlap between the two vowels in the vowel plot, however, which may indicate that KIT is occasionally raised (*guilty* ['gɪlti]) (c.f. fig. 79). DRESS is produced as [ɛ], with no indication of lowering (*step* [stɛp]). This vowel is clearly distinguishable from TRAP, as seen in the vowel plot, as there is practically no overlap between the two vowels (c.f. fig. 79).

In taking a closer look at the phonological environment of the short front vowels in this speaker, we can see that there are no notable linguistic constraints apart from the outlier in FLEECE, for which the vowel is positioned low and back in pre-r environments (labelled “central”, c.f. fig. 91). This outlier should come as no surprise, since in Wells’s lexical set, /i/ before /r/ is actually treated as a different vowel (NEAR, rather than FLEECE). As discussed before, the automatic vowel alignment of FAVE, however, does not make that distinction. In regard to the rest of the analyzed short front vowels and reference vowel, DRESS, KIT and FACE show no drastic outliers based on the phonological environment. Auditory analysis suggests a monophthongized FACE vowel, which, in the vowel plot closely overlaps with KIT, suggesting a raised production of the vowel (*age* [ɛːdʒ]). Jack produces pre-nasal TRAP in the word “grandpa” unlike any other TRAP vowels ['gram,pɑ]. A plot including all TRAP words produced by this speaker illustrates this: The word “grandpa” forms a cluster in a back position (c.f. fig. 78). This may have some effect on his pre-nasal vowels showing up as rather high.

The remaining vowels are presented in fig. 83, with the exception of the diphthongs MOUTH, CHOICE and PRICE, which were not plotted. STRUT is produced as [ʌ], but occasionally slightly more rounded [ʌ̠] (*touches* ['tʌʃəz]), FOOT is produced as [ʊ] (*put* [pʊt]) and is occasionally fronted to [ö] (*good* [göd]), based on auditory analysis. The vowel plot does not show a wide distribution of FOOT tokens, though (see fig. 83). CLOTH, PALM, LOT and THOUGHT appear to be merged based on auditory analysis, but show great variation, perhaps due to the fact that they are produced in both a rounded and unrounded manner ([ɔ] [ɔ̠] [ɔ̠] [ɑ]) (*caught* [kɔt], [kɔ̠t], [kɔ̠t], [kat]). In some instances, the vowel is produced noticeably low and back [ɑ] (*apologize* [ə'pɒlə,dʒaɪz]). NURSE is produced as [ɜ], showing only little variation, which is illustrated in its rather small distribution in the vowel plot. GOOSE is produced as [u] (*move* [muv]) and not found to be fronted, which is illustrated in the rather narrow distribution of tokens in the vowel plot. NEAR is produced as [ɪr] (*beer* [bɪr]), SQUARE is produced as [ɛr], though

occasionally slightly more centralized (*where* [wɜr]), based on auditory analysis (the two vowels are not treated as separate categories in FAVE). START is produced as [ɑr] (*start* [start]), NORTH and FORCE are merged and produced as [ɔr] (*cord* [kɔrd]). The common Guam English pronunciation of *war* as [war] or *quarter* ['kwartər] could not be verified, as those words were not used in the interview. happY is produced as [ɪ] (*baby* ['beɪbɪ]), and lettER is produced as [ə] (*pepper* ['pɛpər]). Regarding this speaker's diphthongs, GOAT is produced as a diphthong and occasionally as a monophthong [ou], [o] (*no* [nou], *go* [go]), PRICE, CHOICE and MOUTH are produced as diphthongs ([aɪ], [ɔɪ], [aʊ]).

clearly distinguishable from FLEECE, which is produced as [i] (*leave* [liv]). Neither of the two vowels show considerable constraints regarding the phonological environment, as figs. 100 and 104 suggest (with the exception of FLEECE in pre-r environments, which should be categorized as NEAR). DRESS is produced as [ɛ], but often lowered ([ɛ̃]) (*went* [wɛ̃nt]), which is illustrated in its noticeable overlap with TRAP (fig. 80). Lowering of DRESS will be discussed at a later stage as an indication of following American regional vowel changes (c.f. *Chapter 4 - Developmental Trajectories of Guam English*). The vowel does not appear to be clearly affected by any one particular phonological environment, as fig. 92 suggests. TRAP is produced low and back, though a nasal system may be in place, as some of his pre-nasal vowels tend to be positioned in a higher, fronter position compared to pre-orals (fig. 88). However, in auditory analysis, I did not find a clearly audible nasal system and in further exploring the linguistic constraints of the vowel, pre-nasal environments do not noticeably stand out (c.f. fig. 92). Auditory analysis further revealed a monophthongized FACE vowel, produced as [e] (*age* [e:ɖʒ]). No clear linguistic constraints are found for FACE.

The remaining vowels are presented in fig. 84 with the exception of the diphthongs MOUTH, CHOICE and PRICE, which were not plotted. STRUT is produced as [ʌ] (*blood* [blʌd]). FOOT is produced as [ʊ] (*put* [pʊt], *look* [lʊk]) but is occasionally fronted to [ö], most likely in words where the vowel is slightly elongated (*good* [göd]). The variation of both fronted and unfronted FOOT are illustrated in the rather widely distributed vowel tokens in this speaker's vowel plot. CLOTH, PALM, LOT and THOUGHT appear to be merged, based on auditory analysis, but show great variation, perhaps due to the fact that they are produced in both a rounded and unrounded manner ([ɔ] [ɜ] [ɔ̃] [ɑ]) (*long* [lɔŋ], [lɜŋ], [lɔ̃ŋ], [lɑŋ]). NURSE is produced as [ɜr], showing only little variation, which is illustrated in its rather small distribution in the vowel plot. GOOSE is occasionally fronted [ü] (*huge* [hjudʒ]), which is illustrated in the rather wide distribution of tokens along the high-back and high-front vowel space. Fronting of GOOSE will be discussed at a later stage as a potential participation in regional American vowel patterns (c.f. *Discussion and Conclusion*). NEAR is produced as [ɪr] (*near* [nɪr]), SQUARE is produced as [ɛr], though occasionally slightly more centralized (*where* [wɜr]), based on auditory analysis. START is produced as [ar] (*start* [start]), NORTH and FORCE are merged and produced as [ɔr]. The common Guam English pronunciation of *war* as [war] was not found in this speaker, instead it was pronounced as [wɔr]. CURE is produced as [ʊ̃], happY is produced as [i] (*happy* ['hapi]),

lettER is produced as [æ] (*letter* ['lɛtər]) and comma is produced as [ə] (*comma* ['kəmə]). Regarding this speaker's diphthongs, GOAT is a monophthong [o] (*home* [hom]), but PRICE, CHOICE and MOUTH are produced as diphthongs ([aɪ], [ɔɪ], [aʊ]).

5.3.5.1.1.3 Kyle's Vowel Production

The vowels of the Caucasian speaker Kyle are mostly standardized American English and are generally lacking regional specificity. For the vowels KIT, DRESS, TRAP, FLEECE and FACE, vowel plots are presented in fig. 81. KIT is produced as [ɪ] (*sister* ['sɪstər]) and is clearly distinguishable from FLEECE, which is produced as [i] (*either* ['iðər]). DRESS is produced as [ɛ], and lowering of the vowel is not common in this speaker. Rather, the vowel is occasionally raised (*get* [gɛt]). TRAP is produced variably, both low and back, as well as raised. Figs. 89 and 93 indicate that pre-nasal TRAP is slightly more raised in contrast to pre-oral environments (*understand* [ˌʌndər'stænd]). FACE is occasionally produced in a monophthongal ([e]), but also in a diphthongal way [eɪ] (*great* [greɪt]; *age* [eɪdʒ]). This makes the interpretation of FACE in fig. 85 problematic, as it was only treated as a monophthong in the vowel analysis. The vowel appears to entirely overlap with FLEECE, which may be due to the occasional diphthongal quality of the vowel for this speaker or because the onset of the monophthong is raised. Figs. 93, 97, 101, 105 and 109 show that there is no clear grouping of the vowel production due to phonological constraints in the vowels KIT, FLEECE or FACE, but DRESS shows a slightly more raised production in pre-r environments, such as in the word “area” (labelled as “central”).

The remaining vowels are presented in fig. 85, with the exception of the diphthongs MOUTH, CHOICE and PRICE, which were not plotted. STRUT is produced as [ʌ] (*run* [rʌn]). FOOT is produced as [ʊ] (*put* [pʊt], *look* [lʊk]). Based on impressions from the auditory analysis, this vowel is rarely fronted. The vowel plot, however, shows a wide distribution including fronted tokens, similar to Eric's vowel plot, who is fronting FOOT on many occasions. CLOTH, PALM, LOT and THOUGHT appear to be merged based on auditory analysis, but show great variation in terms of rounding and unrounding ([ɔ] [ɔ̞] [ɔ̠] [ɑ]) (*long* [lɔŋ], *across* [ə'krɔs], *lost* [lɔst], *lot* [lat]). Fig. 85 indicates that the vowels overlap, but THOUGHT appears to be spread across a wider high/low back area. NURSE is produced as [ɜr] (*church* [tʃɜrʃ]), showing only little variation, which is illustrated in its rather small distribution in the vowel plot. GOOSE is produced as [u] and occasionally fronted to [ü] (*move* [muv], *too* [tü]), which is illustrated in the rather wide

distribution of tokens along the high-back and high-front vowel space. NEAR is produced as [ɪr] (*weird* [wɪrd]), SQUARE is produced as [ɛr], though occasionally slightly more centralized (*there* [ðɜr]), based on auditory analysis. START is produced as [ar] (*far* [far]), NORTH and FORCE are merged and produced as [ɔr] (*born* [bɔrn], *more* [mɔr]). The production of CURE could not be verified due to lack of tokens, happY is produced as [i] (*happy* ['hapi]), lettER is produced as [ə] (*letter* ['lɛtər]) and comma is produced as [ə] (*visa* ['vɪzə]). Regarding this speaker's diphthongs, GOAT is produced as a diphthong and does not appear to be fronted [ou] (*known* [nəʊn]), PRICE, CHOICE and MOUTH are produced as diphthongs (*price* [praɪs], *boy* [bɔɪ], *south* [saʊθ]).

5.3.5.1.1.4 Seth's Vowel Production

The vowels of this acrolectal Filipino (Chamorro) speaker are mostly standardized American English, with a few exceptions that resemble the speech of acrolectal Chamorro Guam English speakers. For the vowels KIT, DRESS, TRAP, FLEECE and FACE, vowel plots are presented in fig. 82, as well as plots that show their linguistic constraints (figs. 94, 98, 102, 106, 110). KIT is produced as [ɪ], but occasionally rounded (*sick* [sɪk], *years* [jɪrɜz]) and is clearly distinguishable from FLEECE, which is produced as [i] (*people* ['pi:pəl]). DRESS is produced as [ɛ], and lowering of the vowel is not common in this speaker (*sense* [sens]). TRAP is produced low and back in all phonetic environments. The vowel plots show a potential clustering of tokens in two positions. Fig. 90 allows for a better examination of this pattern and indicates that pre-nasal TRAP may be slightly more fronted in contrast to pre-oral environments. Fig 94 shows a similar effect but indicates that pre-nasal tokens are not positioned as outliers in comparison to the other phonological environments. The difference between pre-nasal and pre-oral TRAP production is not clearly traceable in auditory analysis, as the production of TRAP generally appears to be low and back (*understandable* [ˌʌndər'stændəbəl], *grandma* ['græmə]). FACE is produced as a monophthongal ([e]) (*hate* [he:t]) and shows no clear lexical distribution in fig. 98. There are no clear linguistic constraints on any of the vowel, but for the vowels FLEECE, TRAP, FACE and DRESS, tokens occurring before an affricate seem to be positioned relatively high and front in the vowel plot compared to the other phonological environments (c.f. figs. 94, 106, 110).

The remaining vowels are presented in fig. 86, with the exception of the diphthongs MOUTH, CHOICE and PRICE, which were not plotted. STRUT is produced as [ʌ], but is occasionally more rounded (*much* [mʌʃ], *publisher* ['pʌblɪʃər]). FOOT is produced as [ʊ] and is

only occasionally fronted (*full* [fɒl], *would* [wöd]). CLOTH, PALM, LOT and THOUGHT appear to be merged based on auditory analysis, and less variable than what was found in the other three speakers discussed here (*boss* [bas]). This is also shown in the rather close overlap of LOT and THOUGHT in the vowel plot. NURSE is produced as [ɜr], though the vowel plot indicates some variation, as NURSE tokens are scattered across a much wider area in this speaker compared Jack, Eric and Kyle (*first* [fɜrst]). GOOSE is produced as [u] and occasionally fronted to [ü] (*do* [dü]), which is illustrated in the rather wide distribution of tokens along the high-back and high-front vowel space. NEAR is produced as [ɪr] (*here* [hɪr]), SQUARE is produced as [ɛr], though occasionally slightly more centralized (*where* [wɜr]). START is produced as [ar] (*part* [part]), NORTH and FORCE are merged and produced as [ɔr] (*born* [bɔrn]). happY is produced as [i] (*sorry* ['sari]) and lettER is produced as [ə] (*paper* ['peɪpər]). Regarding this speaker's diphthongs, GOAT is produced as a monophthong (*road* [roud]) and does not appear to be fronted, which is indicated in the speaker's vowel plot (fig. 86). PRICE, CHOICE and MOUTH are produced as diphthongs (*fire* ['faɪər], *choice* [tʃɔɪs], *house* [haus]).

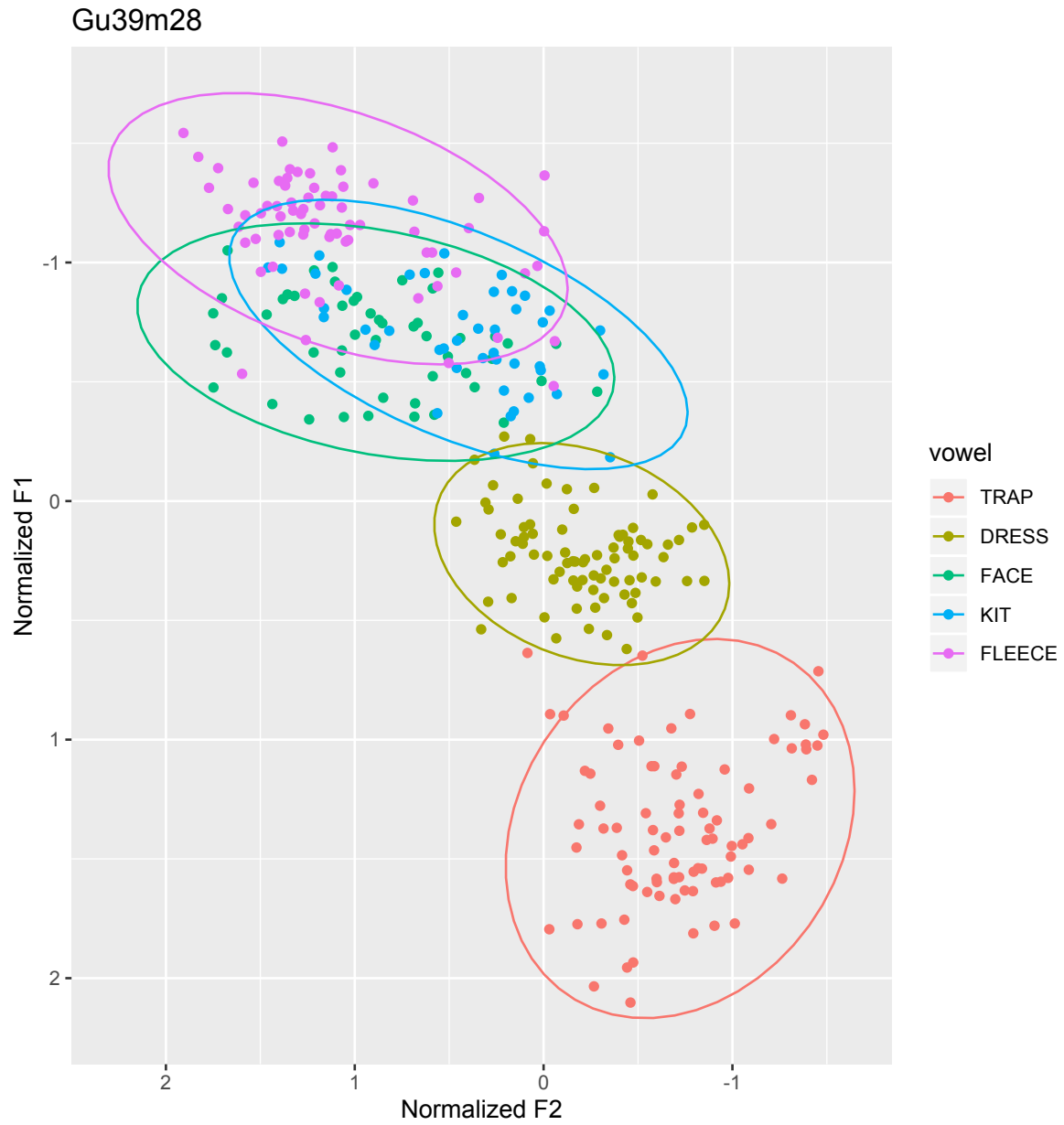


Figure 79 - Vowel plot of the short front vowels KIT, DRESS and TRAP, as well FLEECE and FACE of the basilectal Chamorro participant, Jack, (speaker code: Gu39m28).

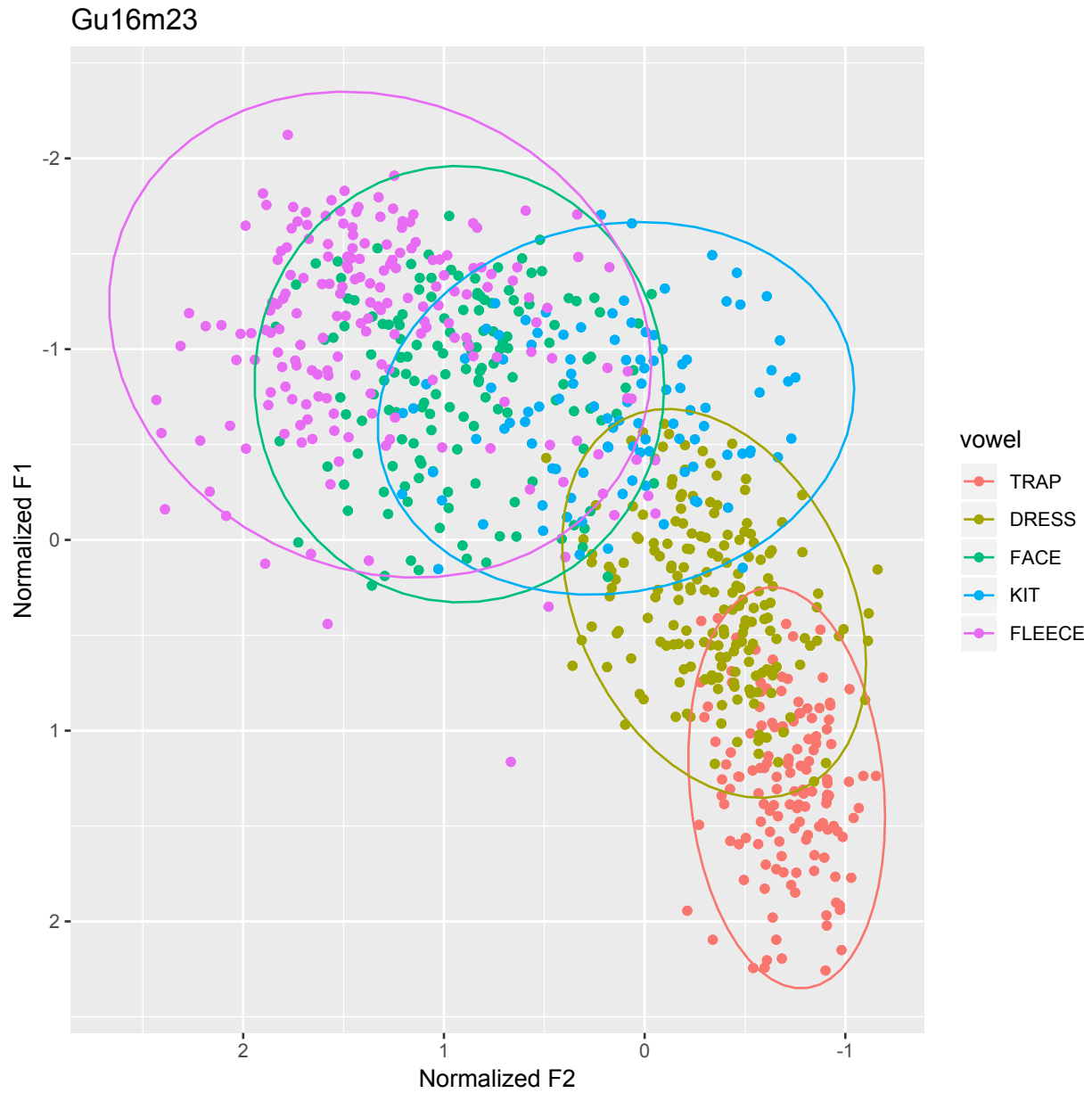


Figure 80 - Vowel plot of the short front vowels KIT, DRESS and TRAP, as well FLEECE and FACE of the acrolectal Chamorro participant, Eric, (speaker code: Gu16m23).

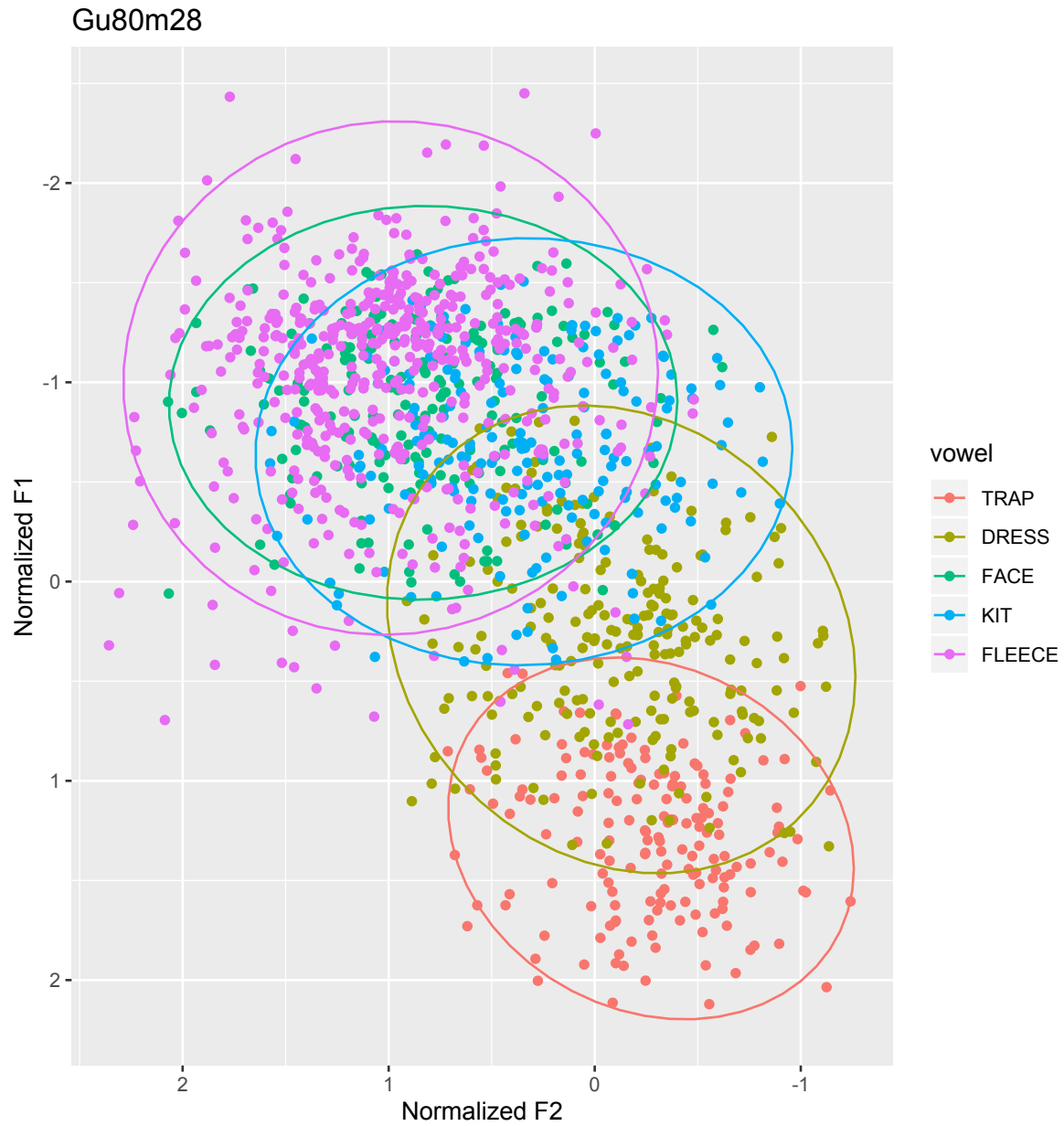


Figure 81 - Vowel plot of the short front vowels KIT, DRESS and TRAP, as well FLEECE and FACE of the acrolectal Caucasian participant, Kyle, (speaker code: Gu80m28).

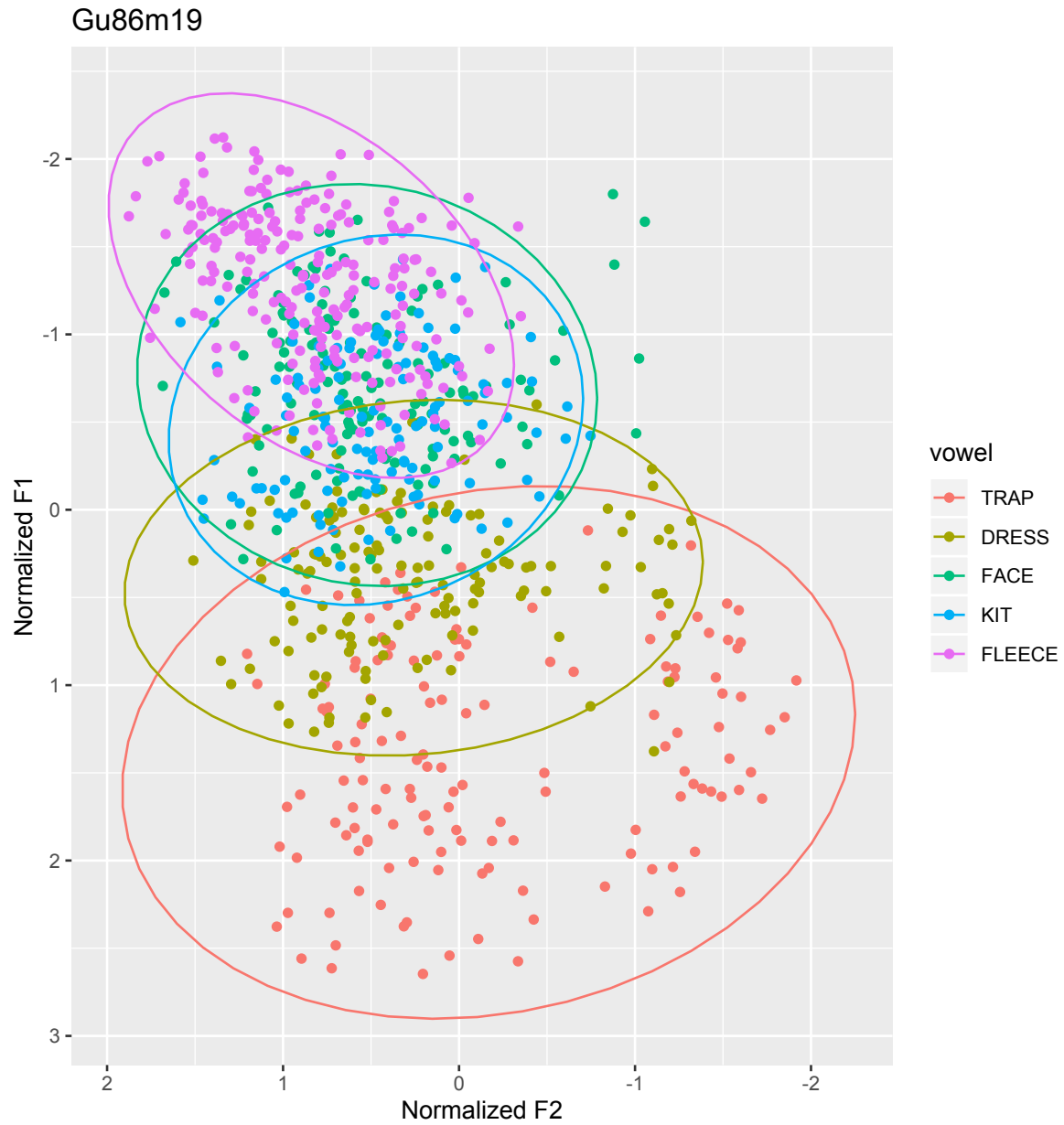


Figure 82 - Vowel plot of the short front vowels KIT, DRESS and TRAP, as well FLEECE and FACE of the acrolectal Filipino (Chamorro) participant, Seth, (speaker code: Gu86m19).

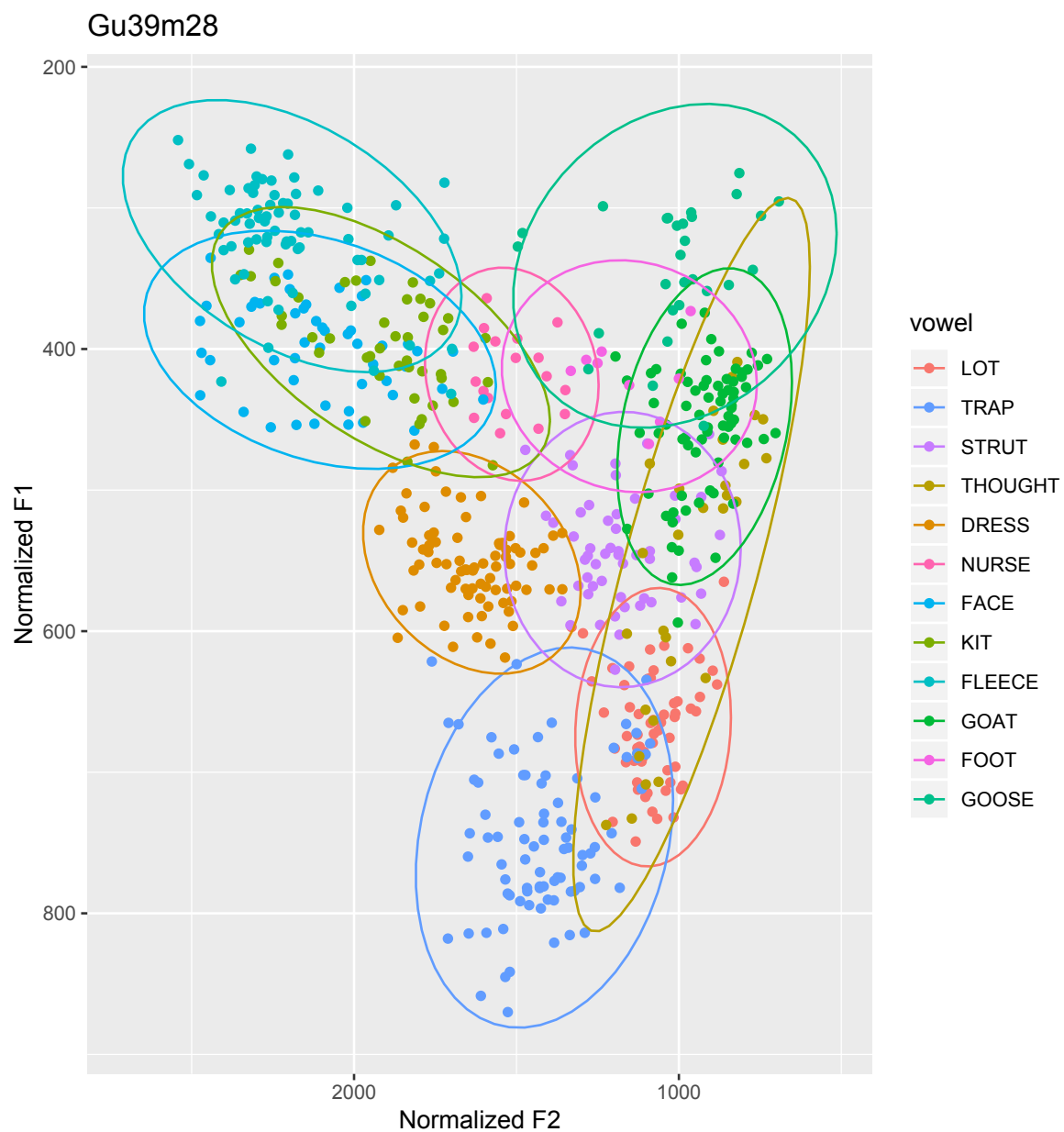


Figure 83 - Vowel plot of the basilectal Chamorro participant, Jack, including all vowels apart from diphthongs CHOICE, MOUTH and PRICE (speaker code: Gu39m28).

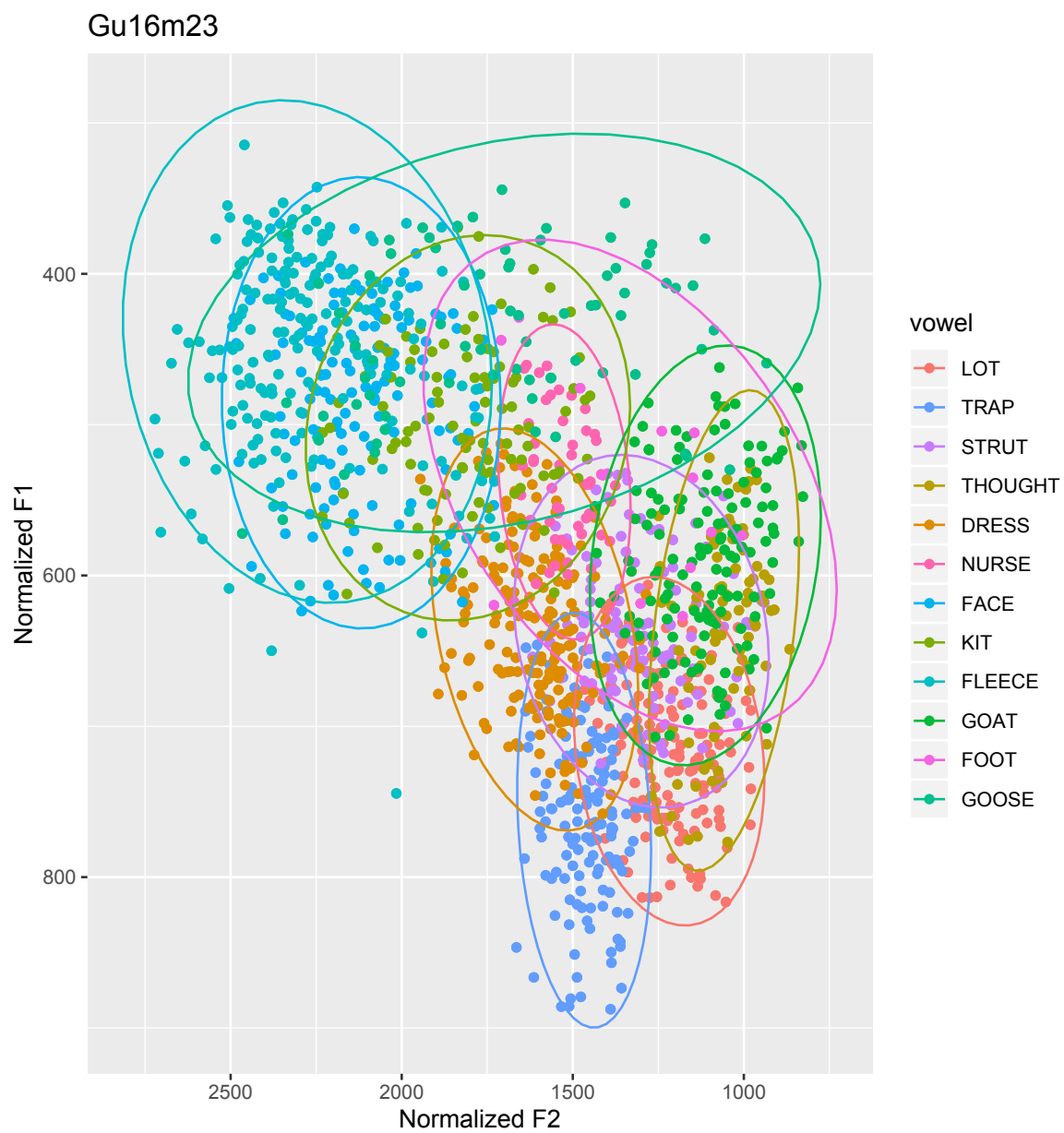


Figure 84 - Vowel plot of the acrolectal Chamorro participant, Eric, including all vowels apart from diphthongs CHOICE, MOUTH and PRICE (speaker code: Gu16m23).

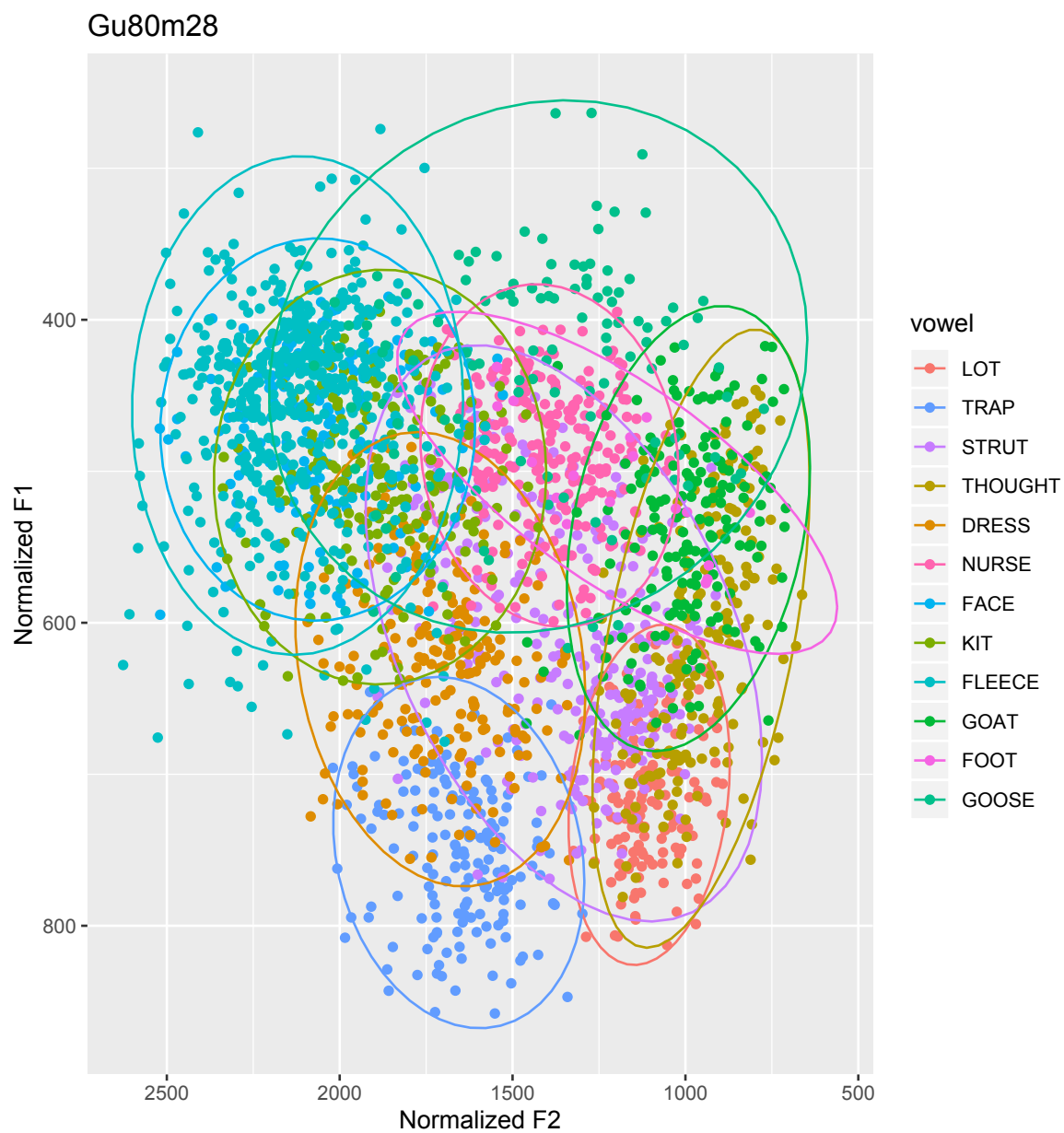


Figure 85 - Vowel plot of the acrolectal Caucasian participant, Kyle, including all vowels apart from diphthongs CHOICE, MOUTH and PRICE (speaker code: Gu80m28).

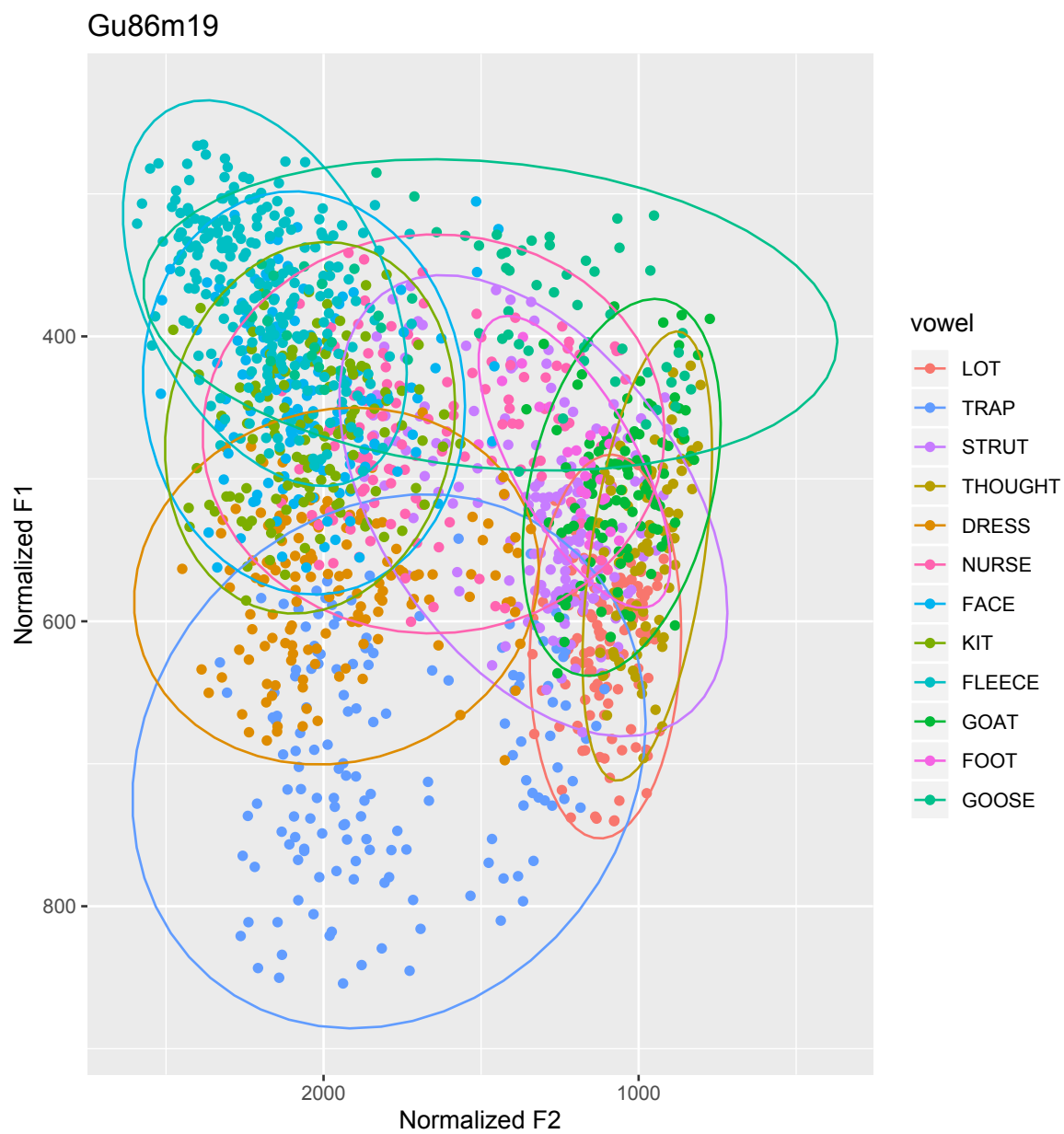


Figure 86 - Vowel plot of the acrolectal Filipino (Chamorro) participant, Seth, including all vowels apart from diphthongs CHOICE, MOUTH and PRICE (speaker code: Gu86m19).

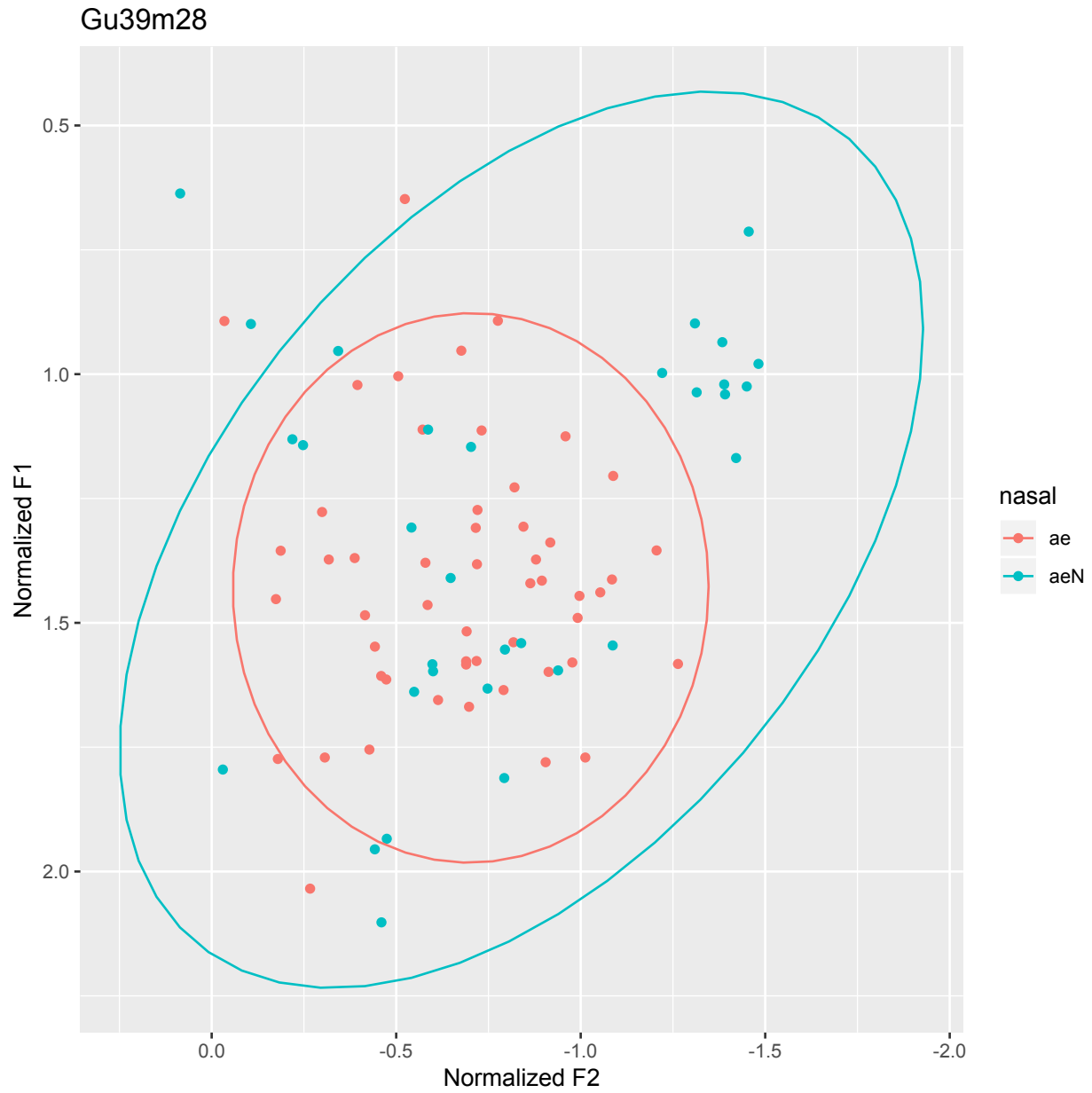


Figure 87 - Distribution of pre-nasal (aeN) and pre-oral (ae) TRAP vowel tokens in basilectal Chamorro speaker, Jack (speaker code: Gu39m28).

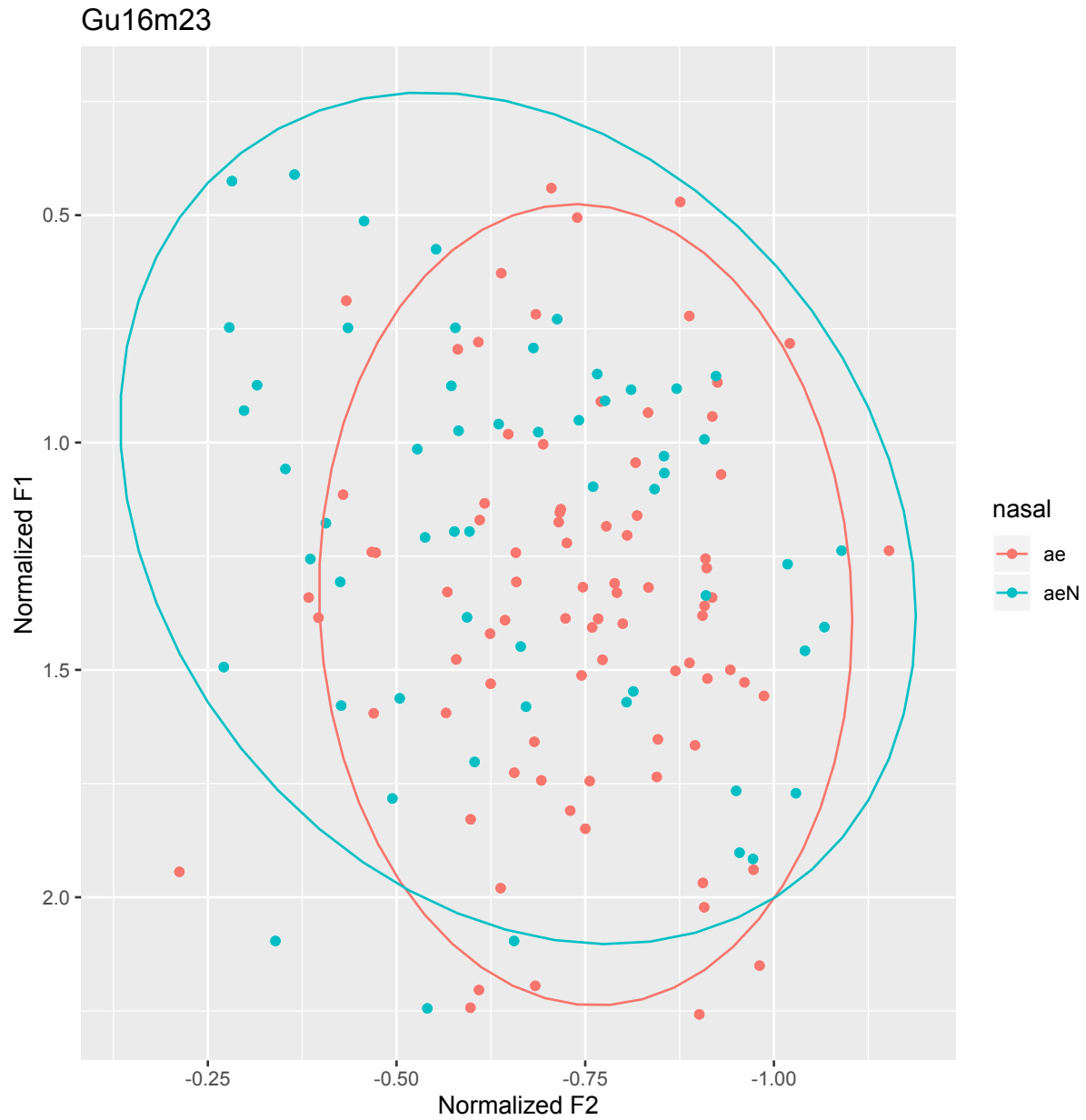


Figure 88 - Distribution of pre-nasal (aeN) and pre-oral (ae) TRAP vowel tokens in acrolectal Chamorro speaker, Eric (speaker code: Gu16m23).

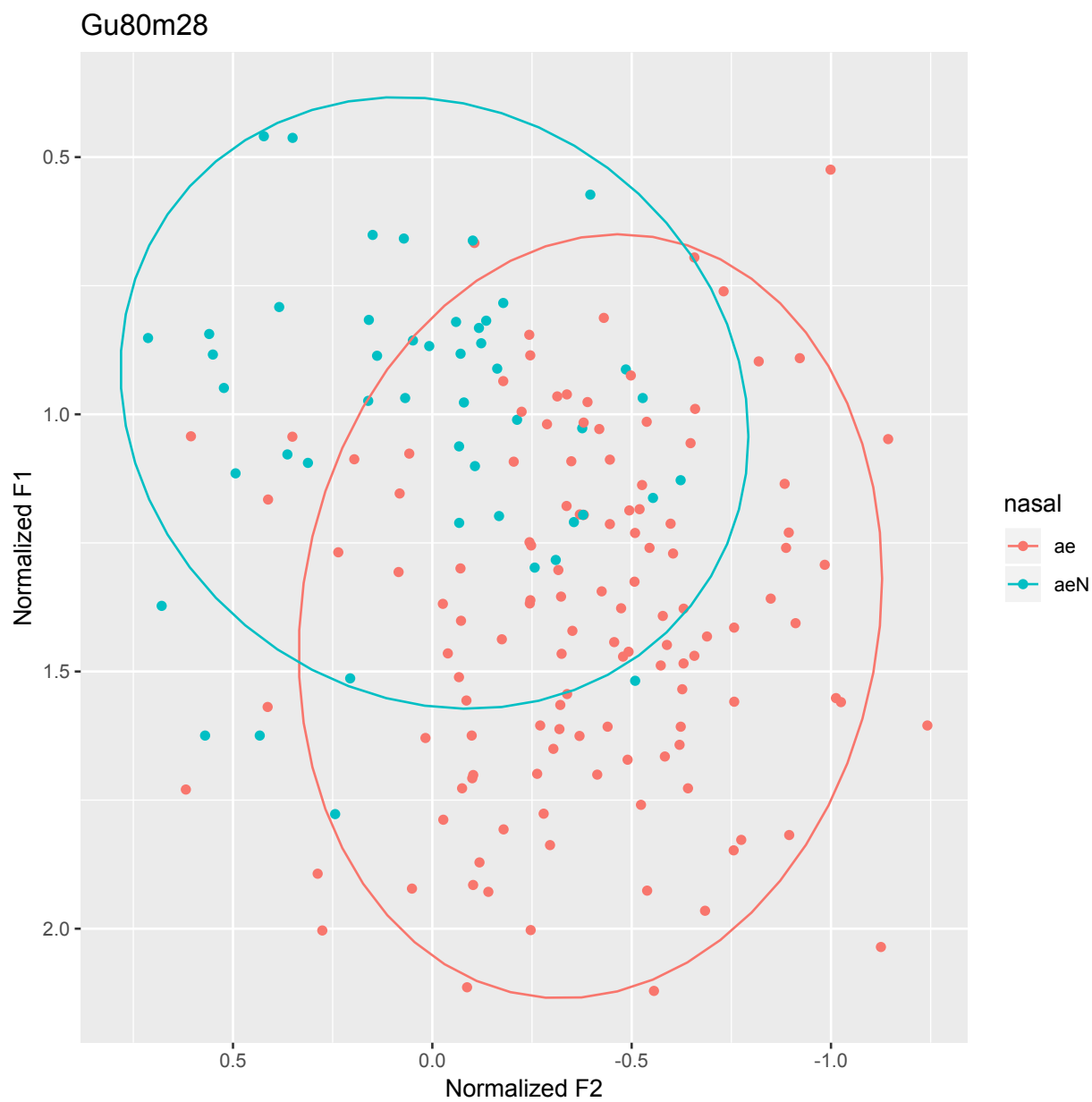


Figure 89 - Distribution of pre-nasal (aeN) and pre-oral (ae) TRAP vowel tokens in acrolectal Caucasian speaker, Kyle (speaker code: Gu80m28).

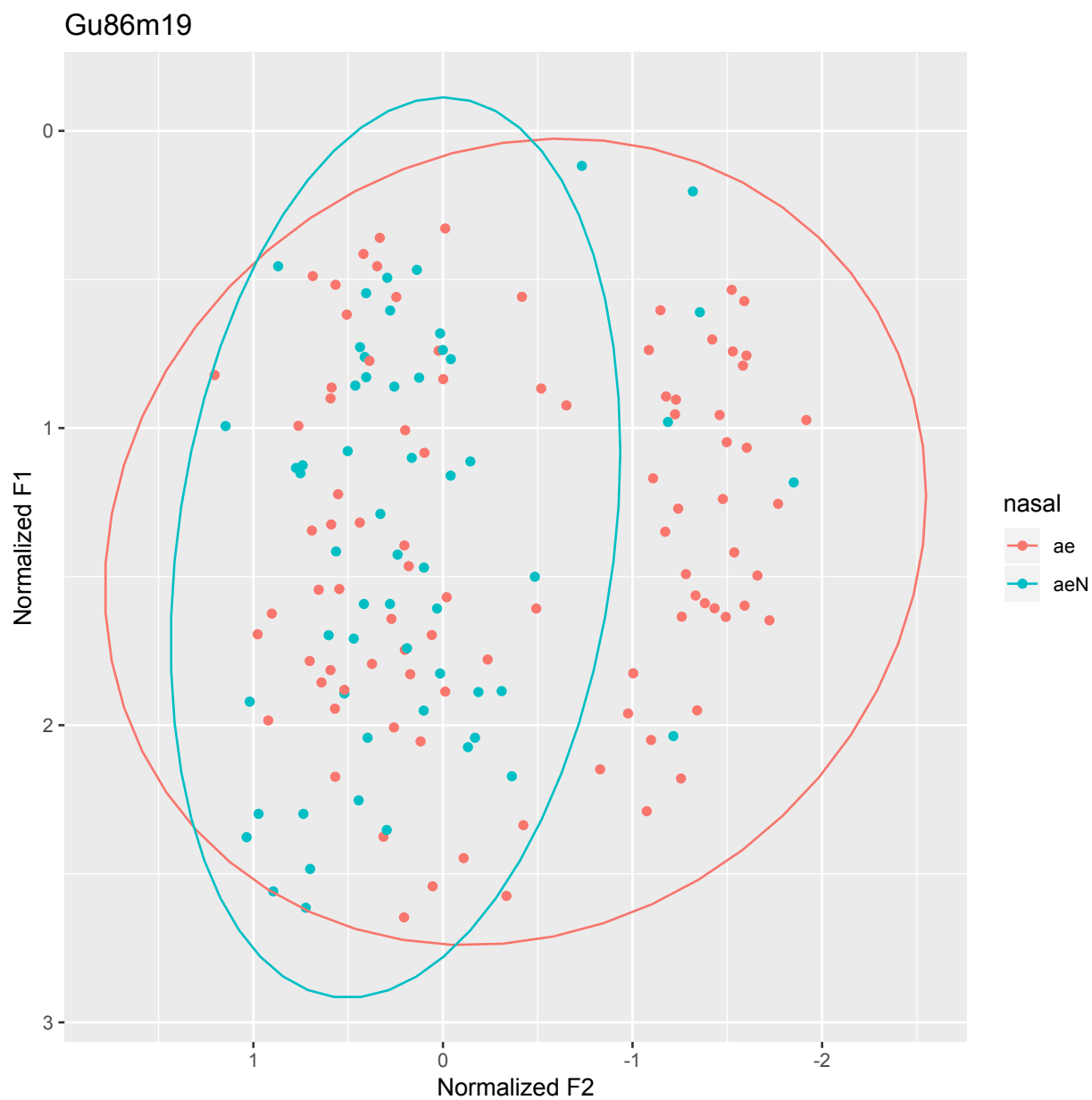


Figure 90 - Distribution of pre-nasal (aeN) and pre-oral (ae) TRAP vowel tokens in acrolectal Filipino (Chamorro) speaker, Seth (speaker code: Gu86m19).

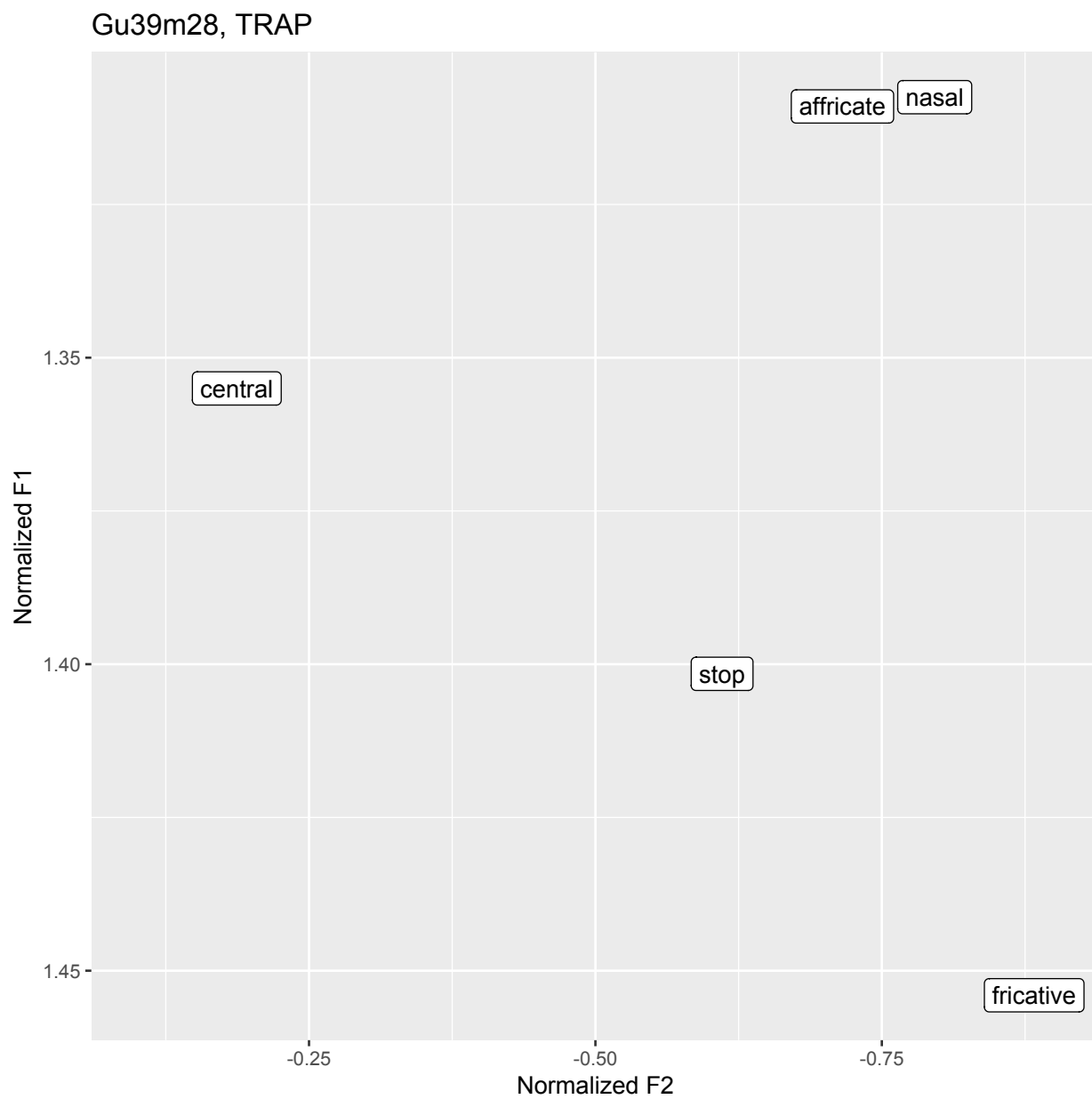


Figure 91 - Linguistic constraints on the vowel TRAP in Jack. (Speaker code: Gu39m28)

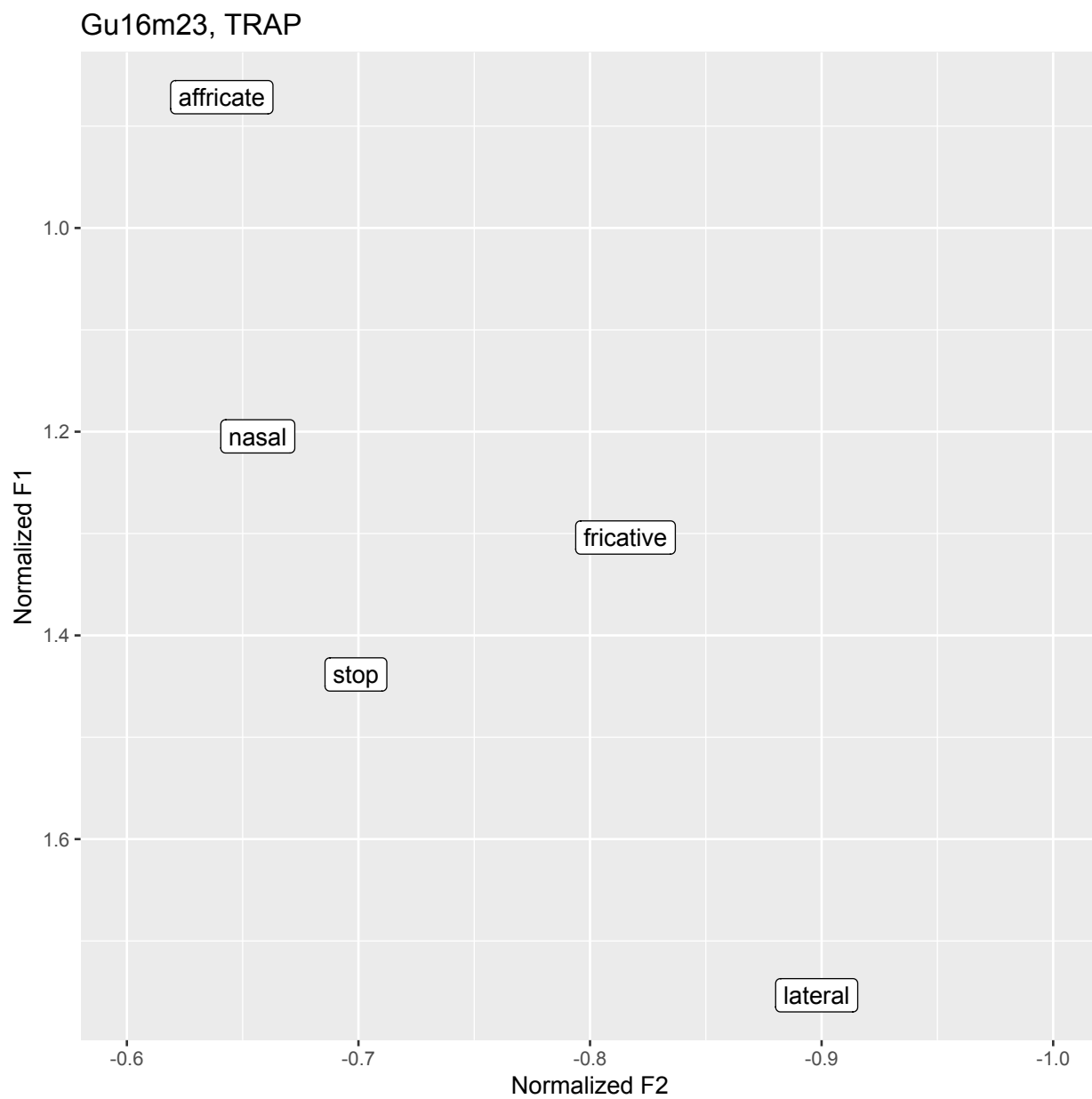


Figure 92 - Linguistic constraints on the vowel TRAP in Eric. (Speaker code: Gu16m23)

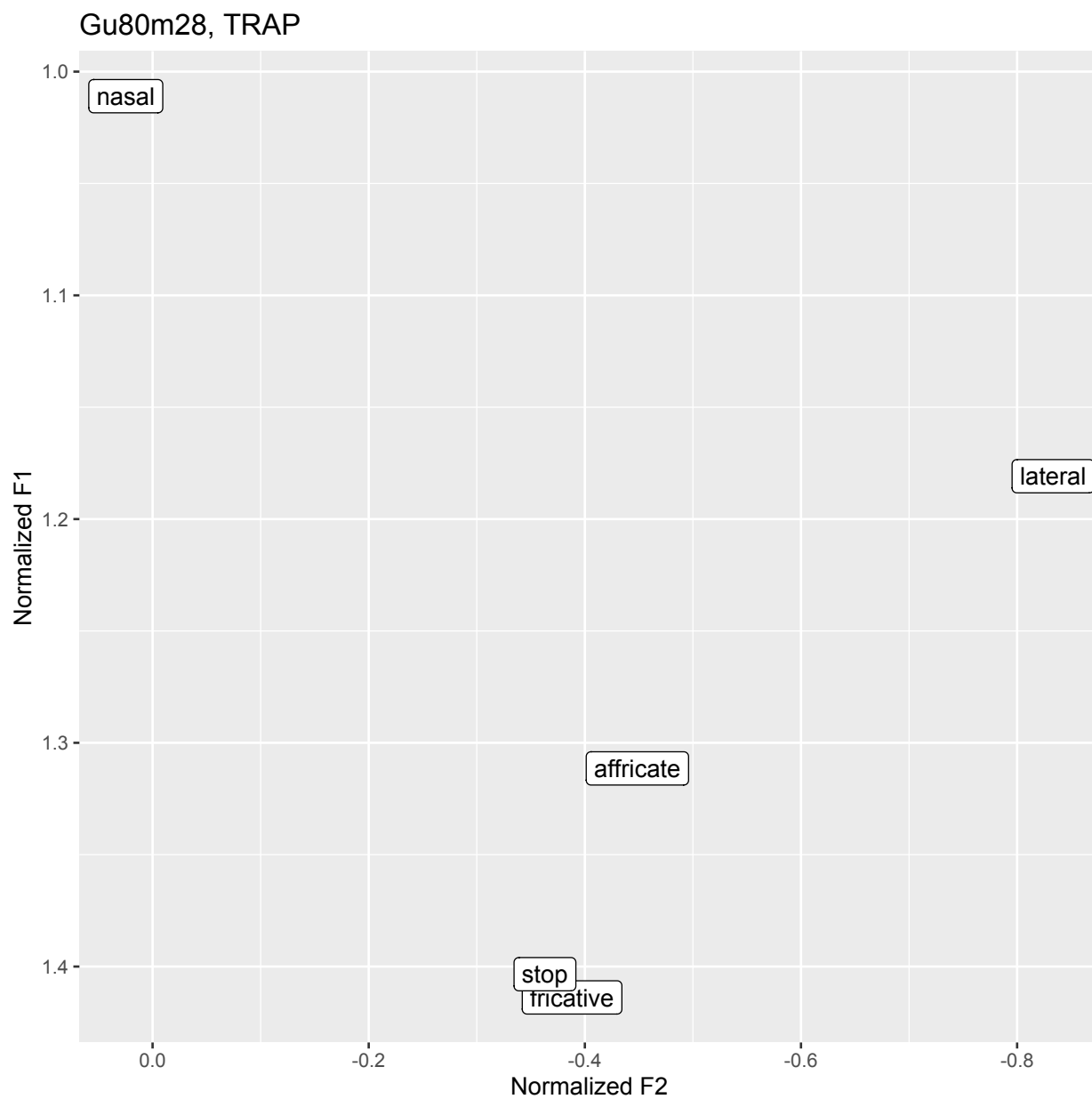


Figure 93 - Linguistic constraints on the vowel TRAP in Kyle. Pre-nasal tokens are positioned noticeably high and front compared to the other phonological environments. (Speaker code: Gu80m28)

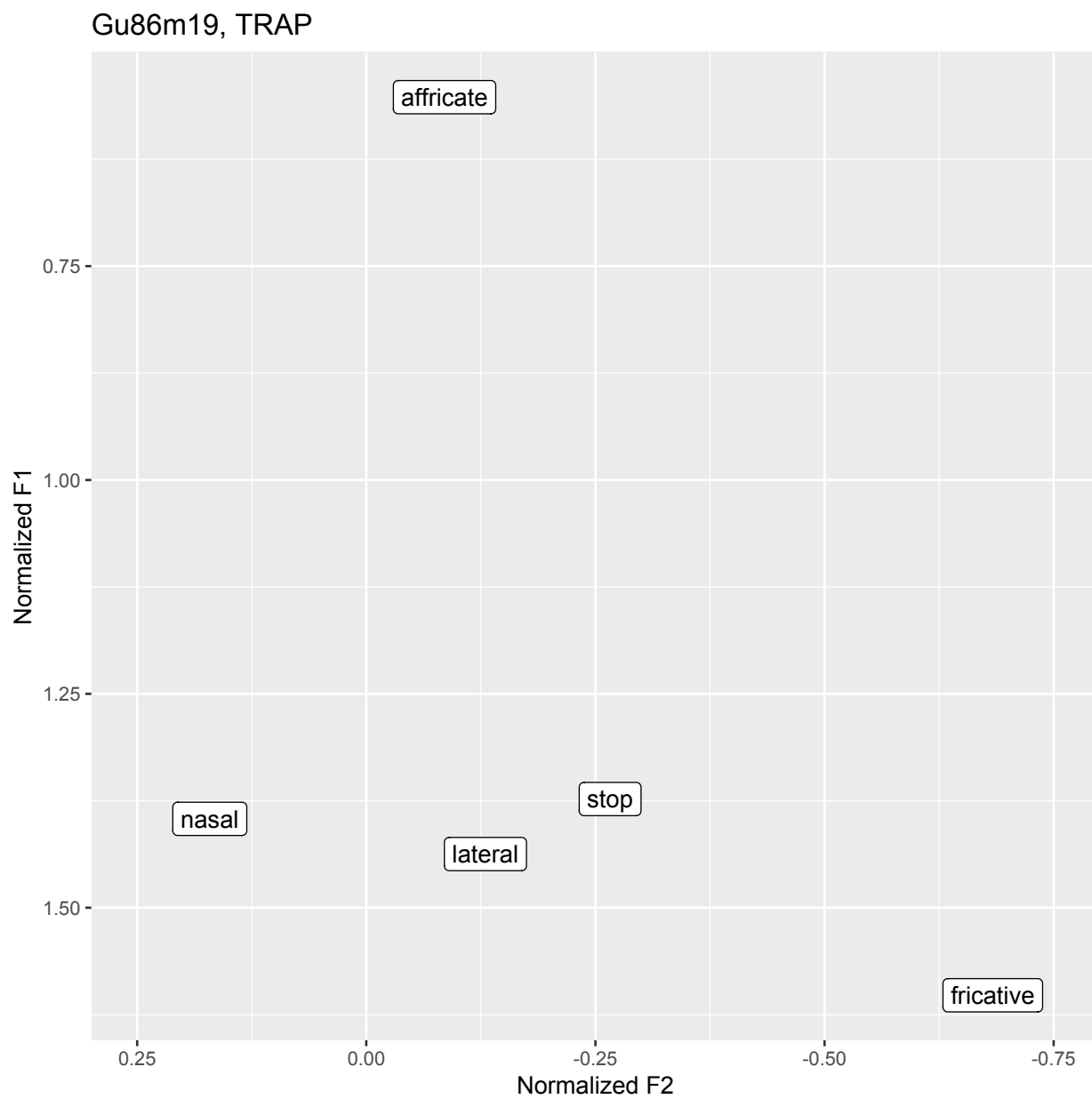


Figure 94 - Linguistic constraints on the vowel TRAP in Seth. Tokens before affricates are positioned slightly higher and fronter in comparison to the other phonological environments. (Speaker code: Gu86m19)

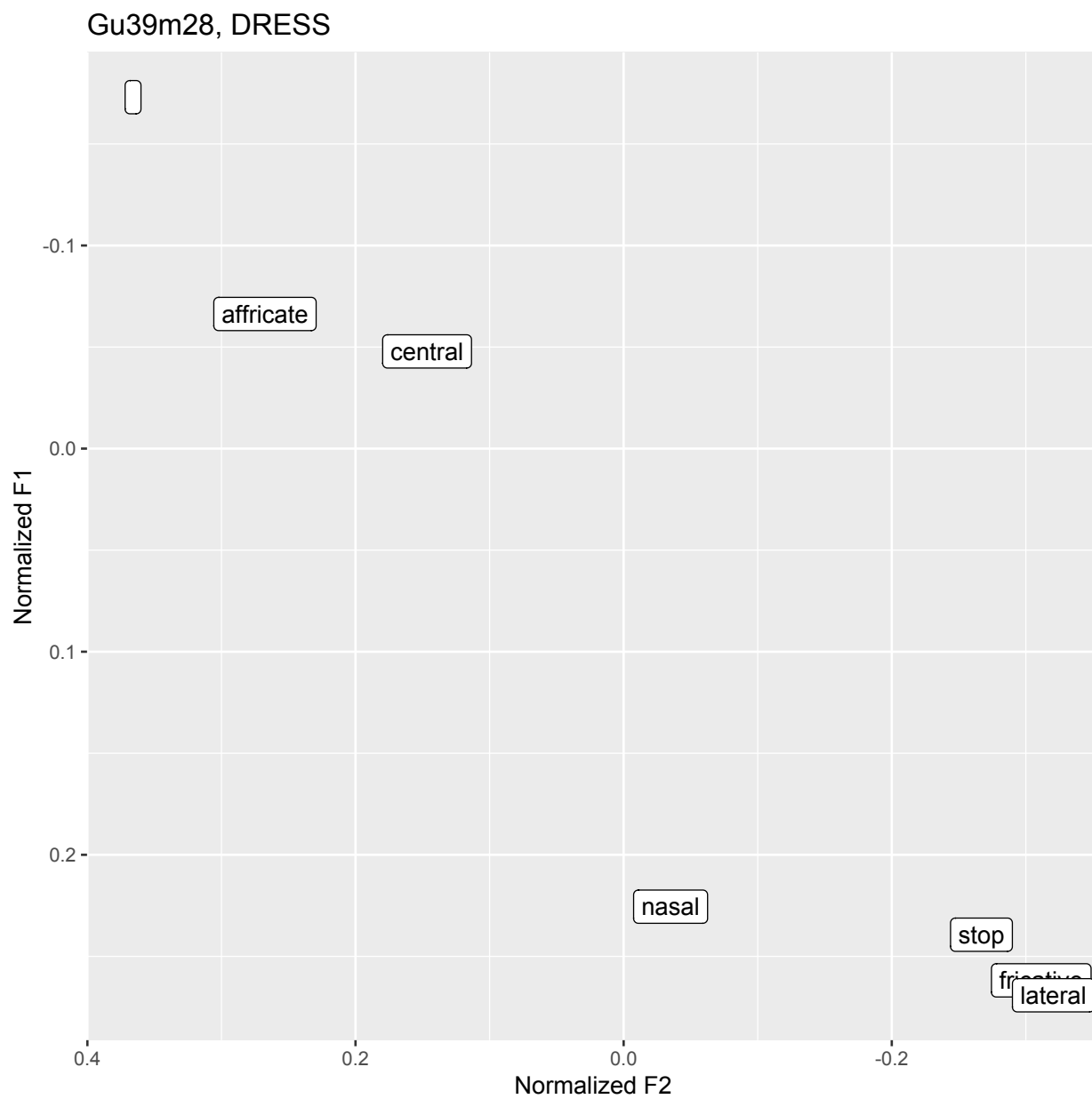


Figure 95 - Linguistic constraints on the vowel DRESS in Jack. (Speaker code: Gu39m28)

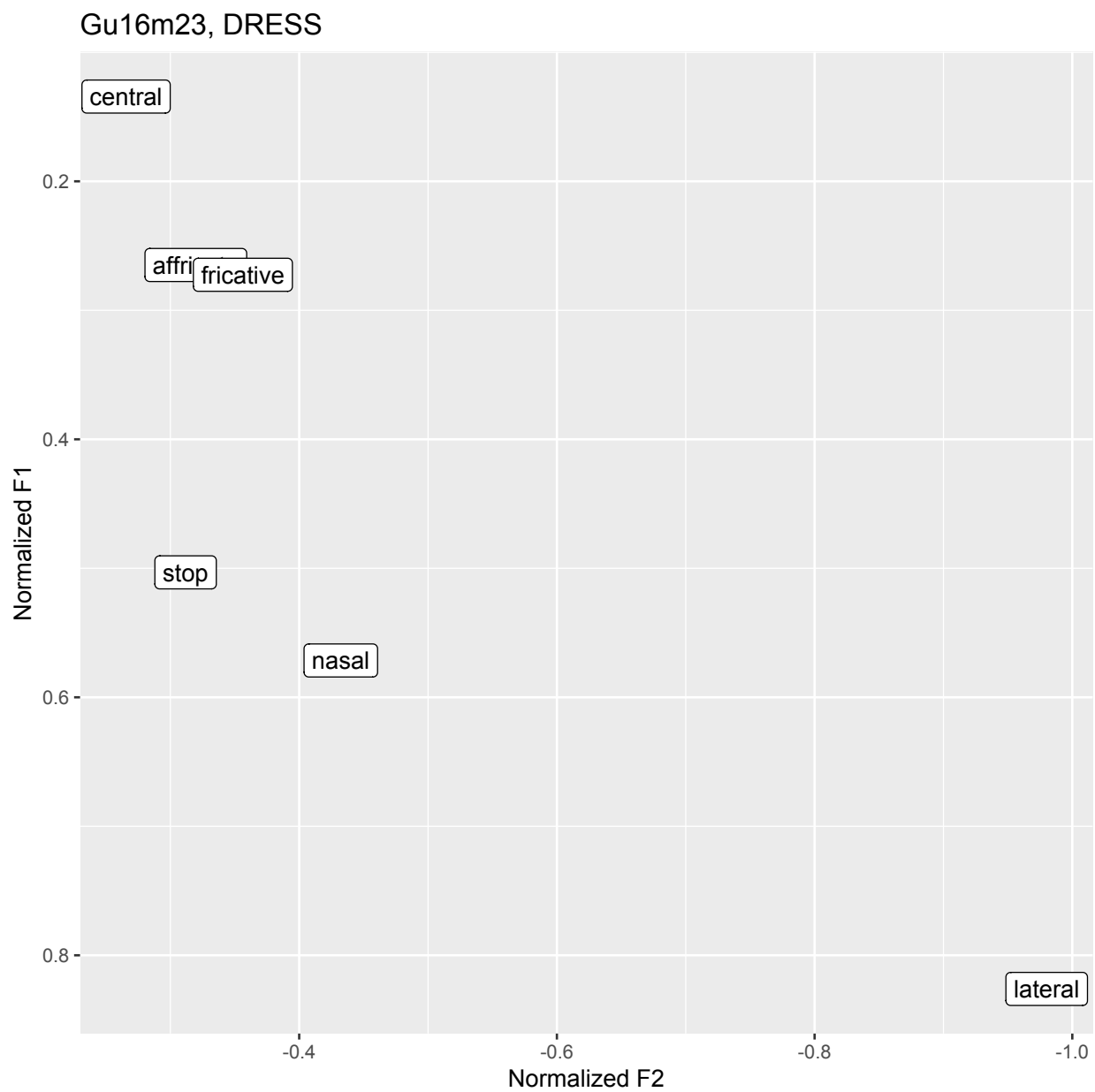


Figure 96 - Linguistic constraints on the vowel DRESS in Eric. Tokens occurring before laterals appear to be positioned slightly lower and backer compared to the other phonological environments. (Speaker code: Gu16m23)

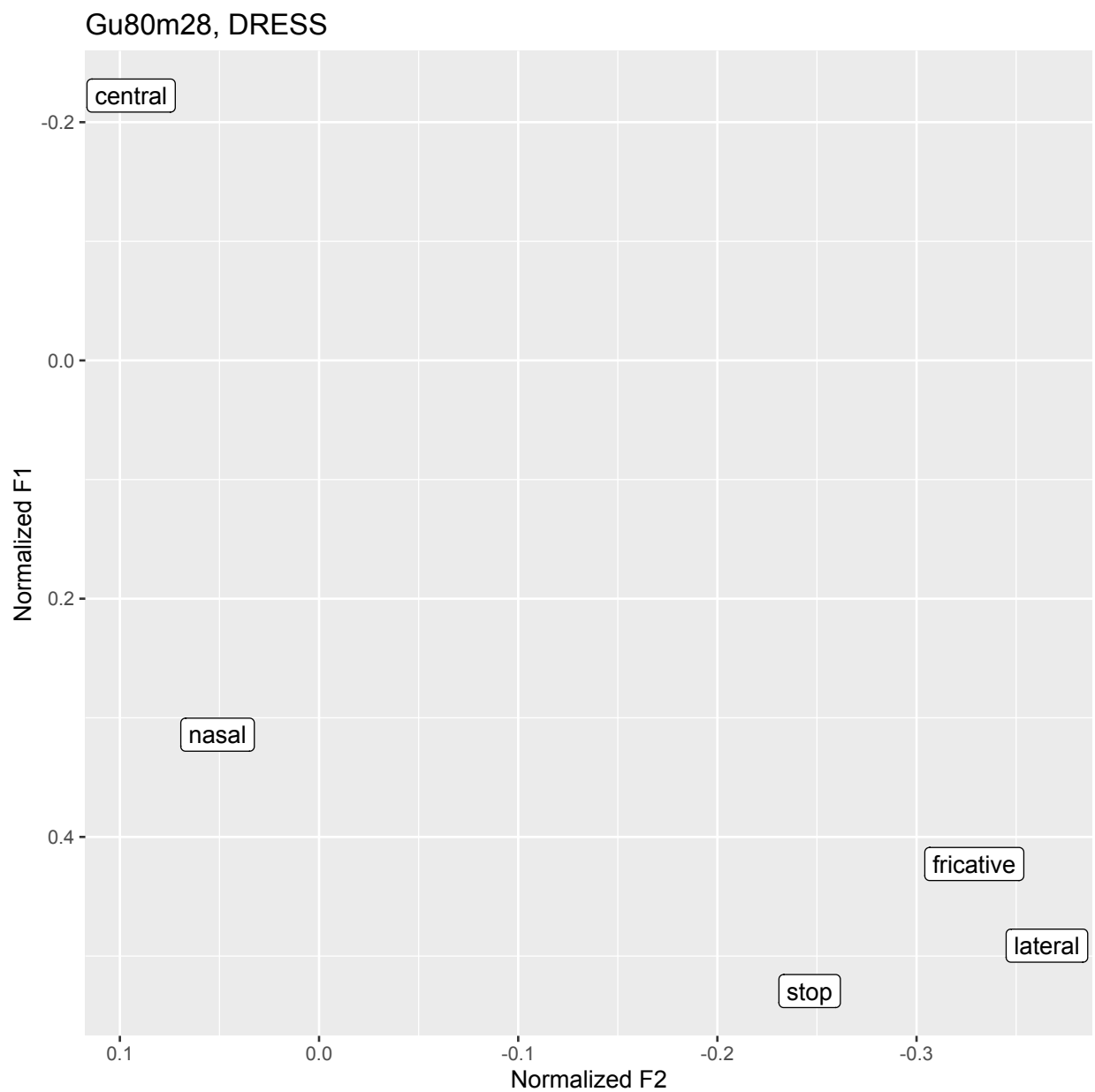


Figure 97 - Linguistic constraints on the vowel DRESS in Kyle. Tokens occurring in pre-r environments, i.e. pre-central appear to be positioned slightly higher and fronter compared to the other phonological environments. (Speaker code: Gu80m28)

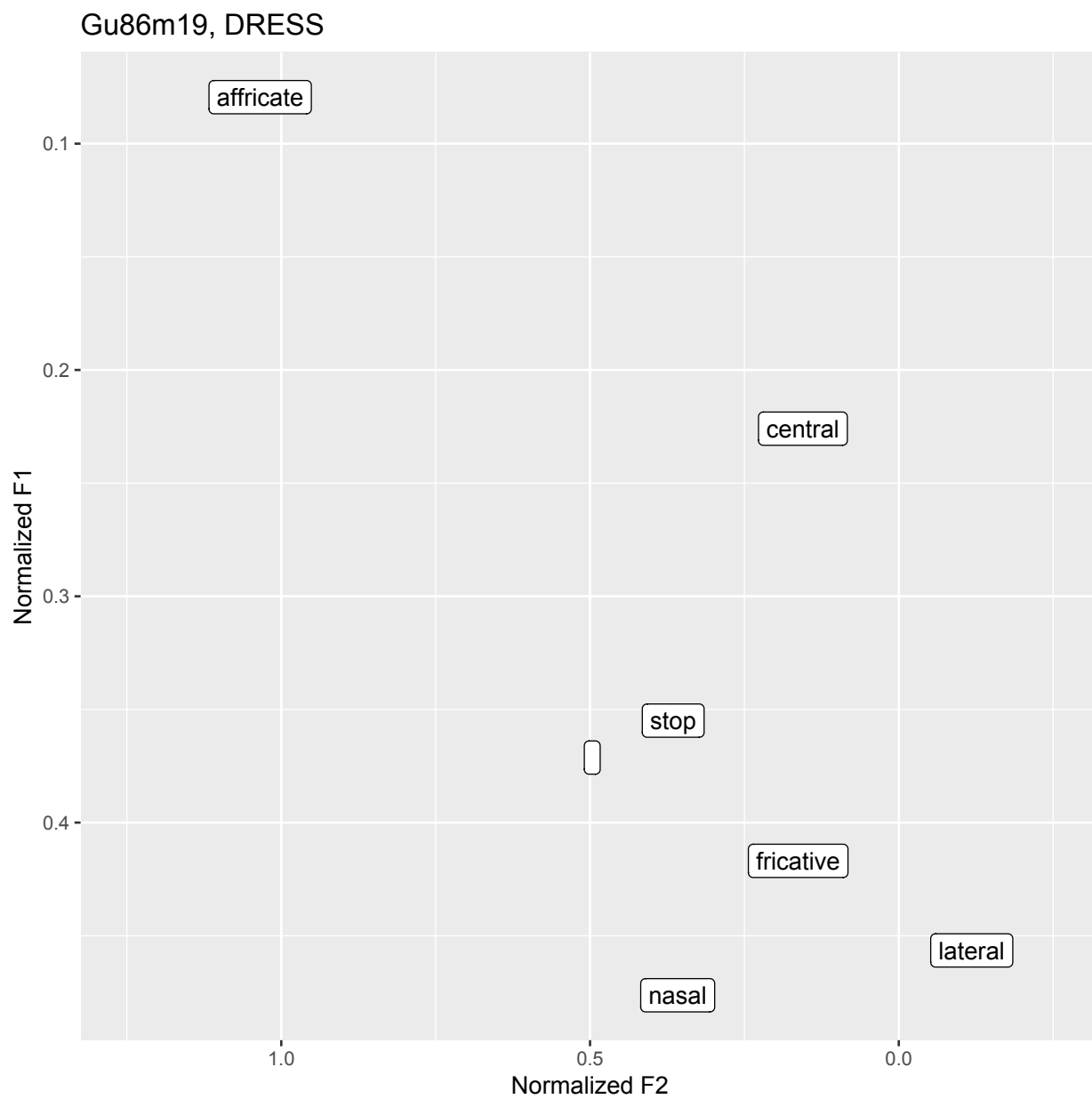


Figure 98 - Linguistic constraints on the vowel DRESS in Seth. Tokens occurring before affricates appear to be positioned slightly higher and fronter compared to the other phonological environments. (Speaker code: Gu86m19)

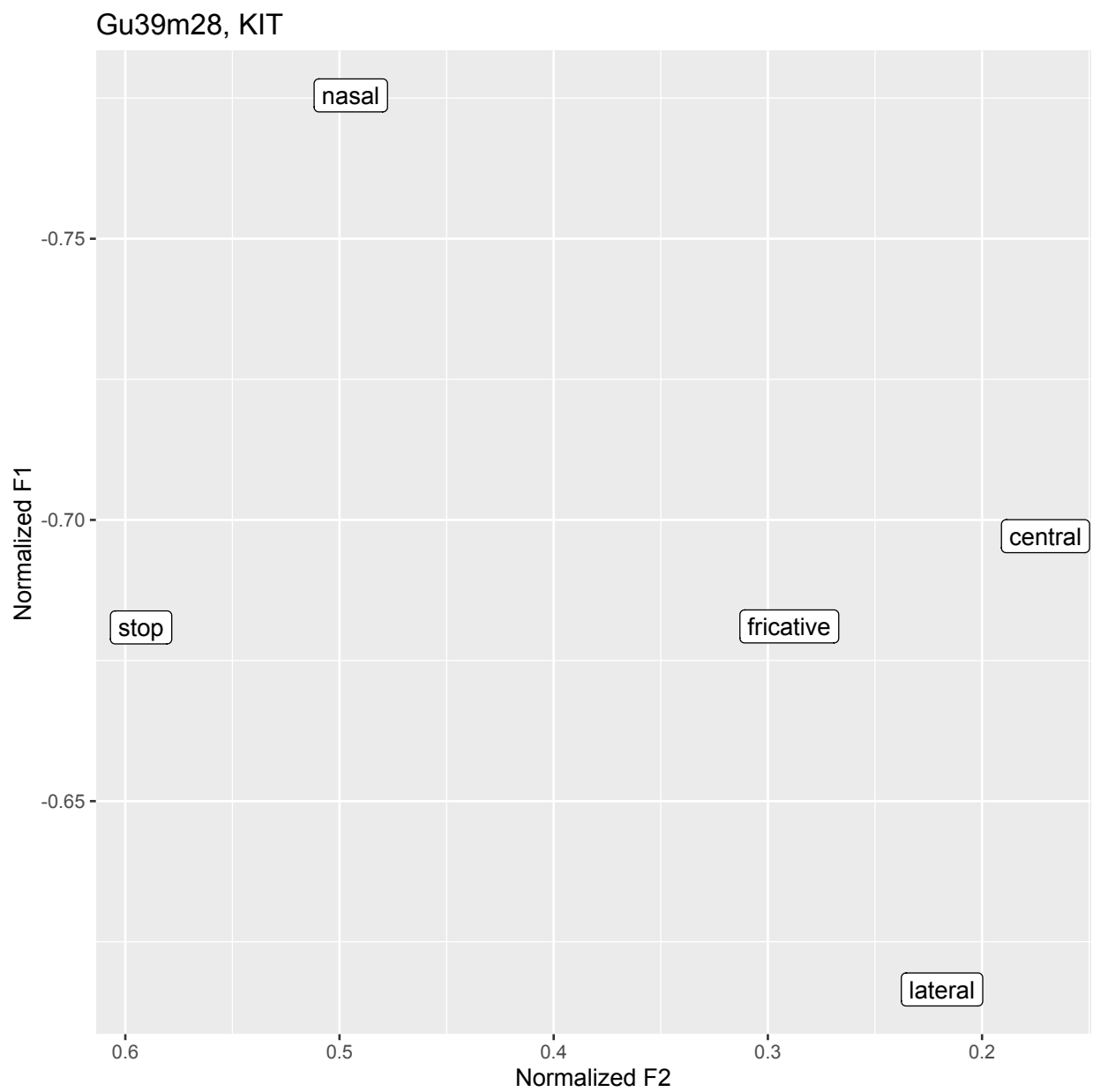


Figure 99 - Linguistic constraints on the vowel KIT in Jack. (Speaker code: Gu39m28)

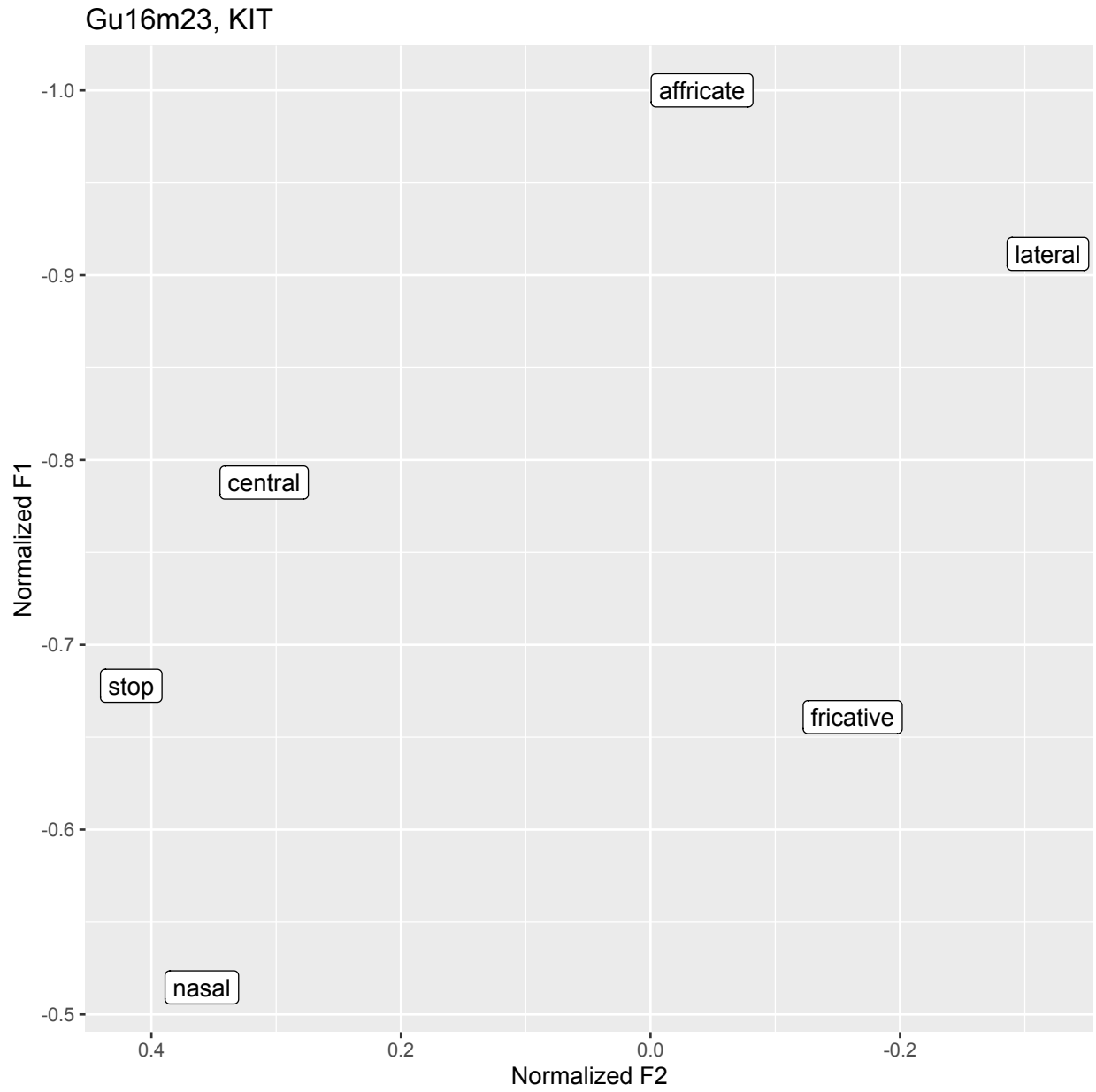


Figure 100 - Linguistic constraints on the vowel KIT in Eric. (Speaker code: Gu16m23)

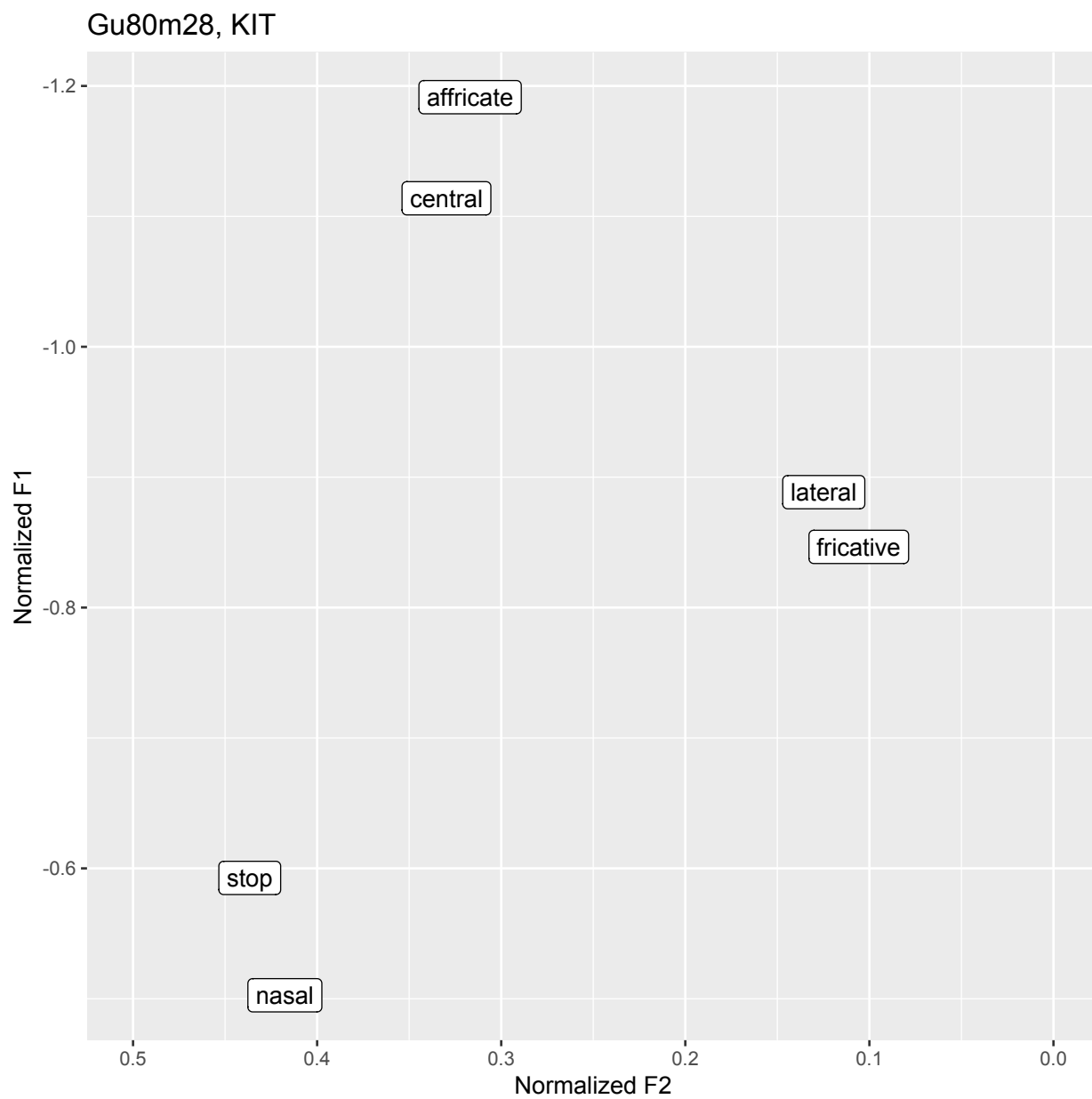


Figure 101 - Linguistic constraints on the vowel KIT in Kyle. (Speaker code: Gu80m28)

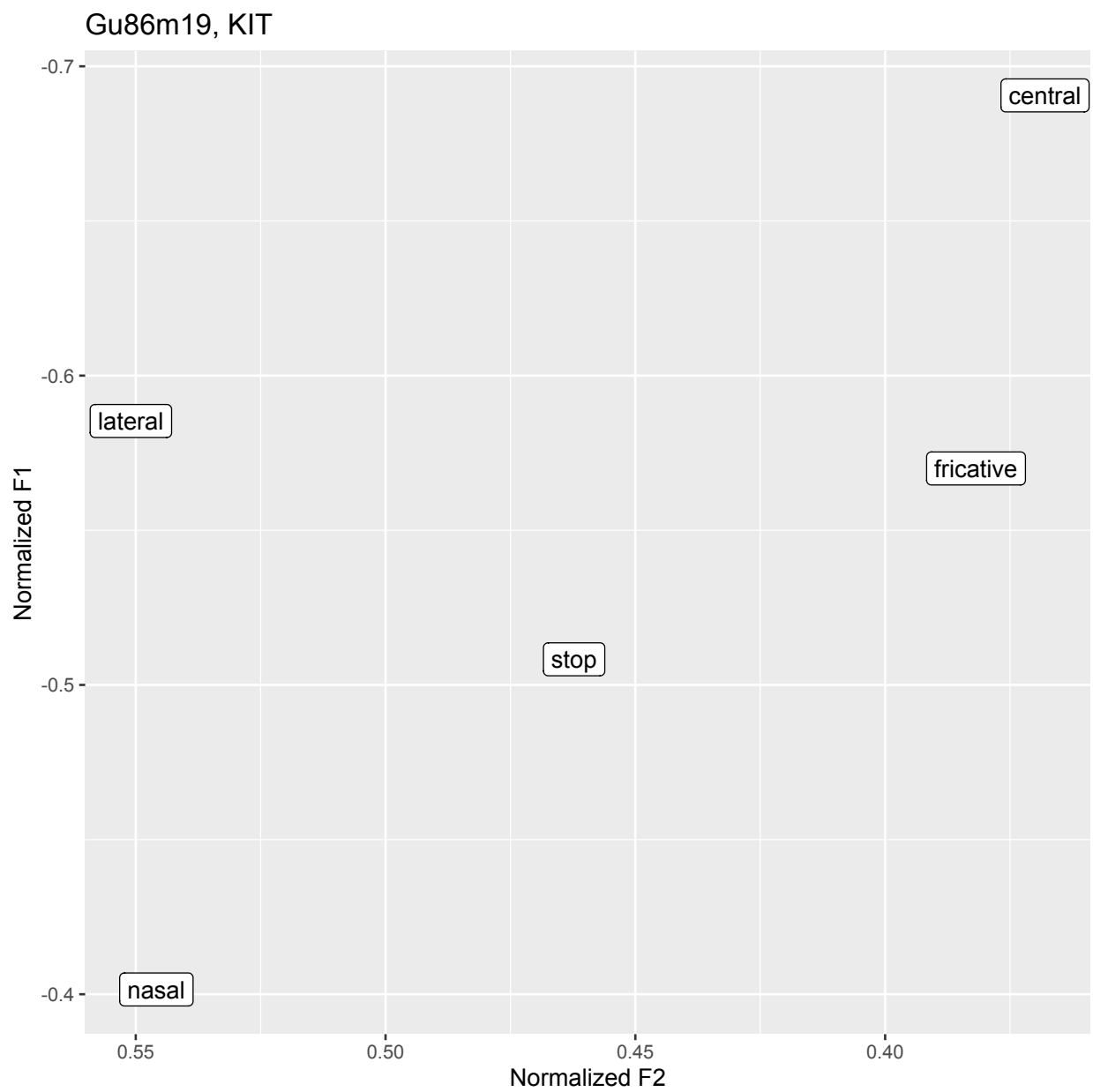


Figure 102 - Linguistic constraints on the vowel KIT in Seth. (Speaker code: Gu80m28)

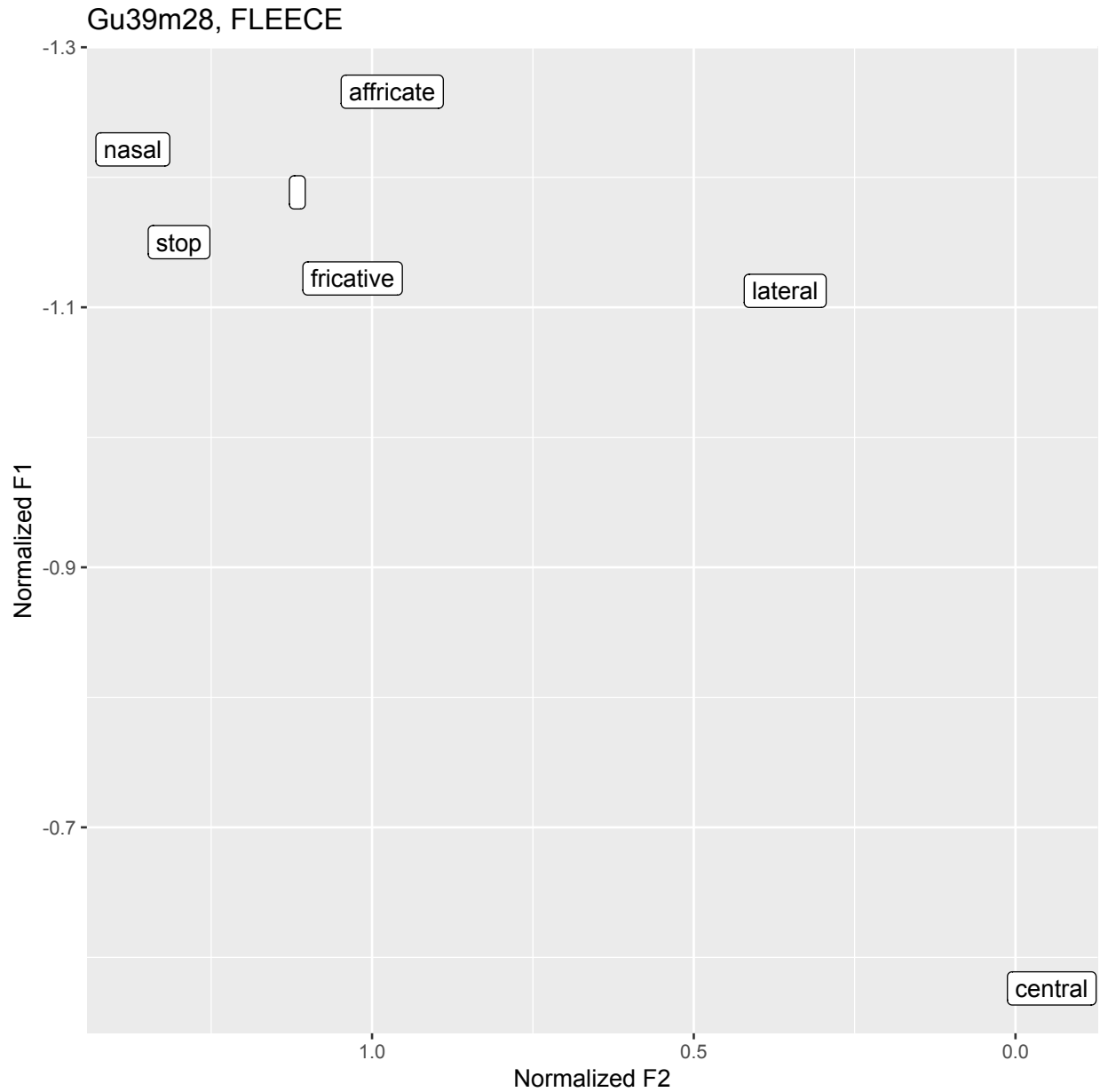


Figure 103 - Linguistic constraints on the vowel FLEECE in Jack. Tokens occurring in pre-r environments, i.e. pre-central appear to be positioned lower and backer compared to the other phonological environments, which is due to the fact that they would be categorized as NEAR rather than FLEECE in Wells's Lexical Set. (Speaker code: Gu39m28)

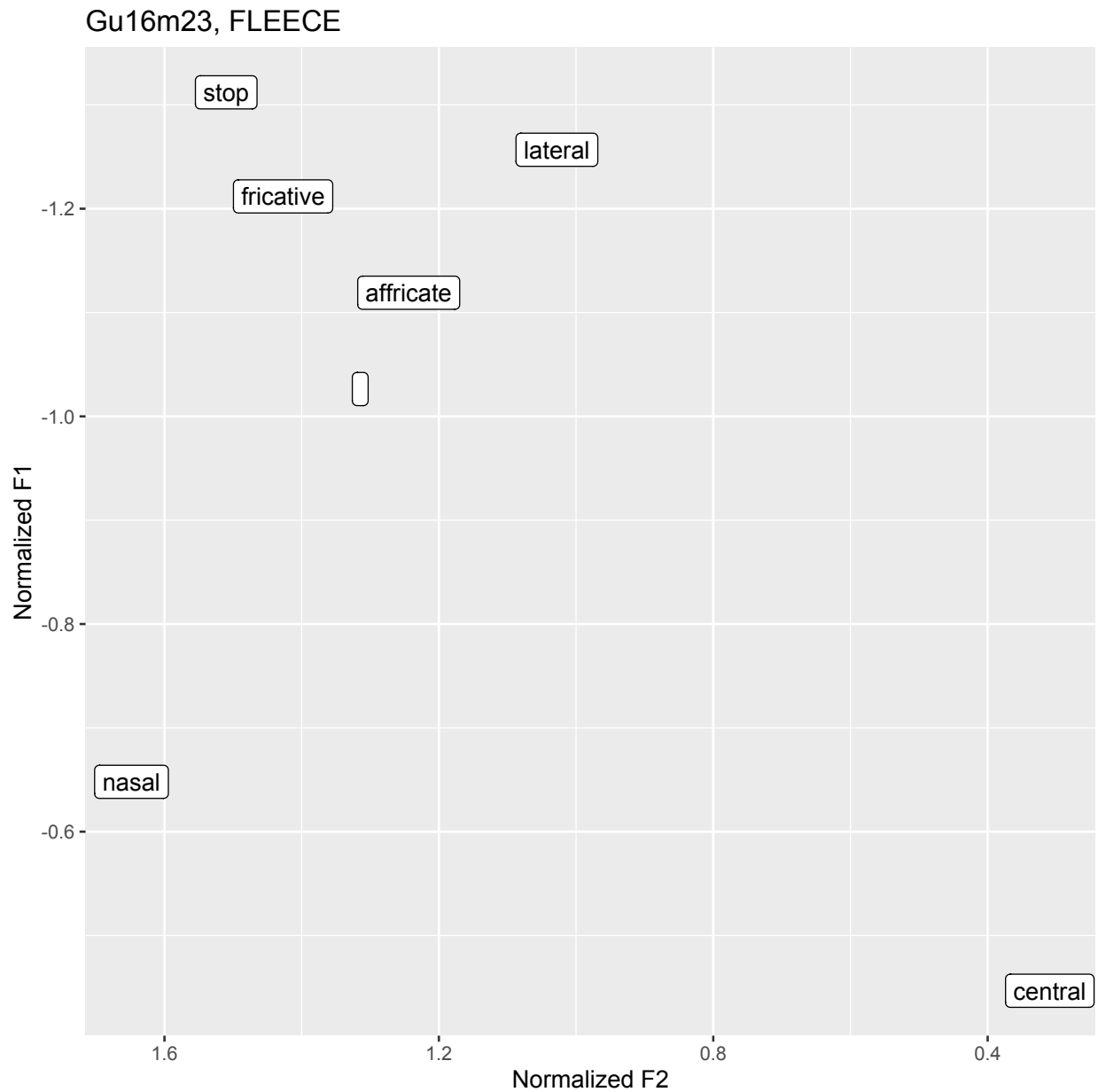


Figure 104 - Linguistic constraints on the vowel FLEECE in Eric. Tokens occurring in pre-r environments, i.e. pre-central appear to be positioned lower and backer compared to the other phonological environments, which is due to the fact that they would be categorized as NEAR rather than FLEECE in Wells's Lexical Set. (Speaker code: Gu16m23)

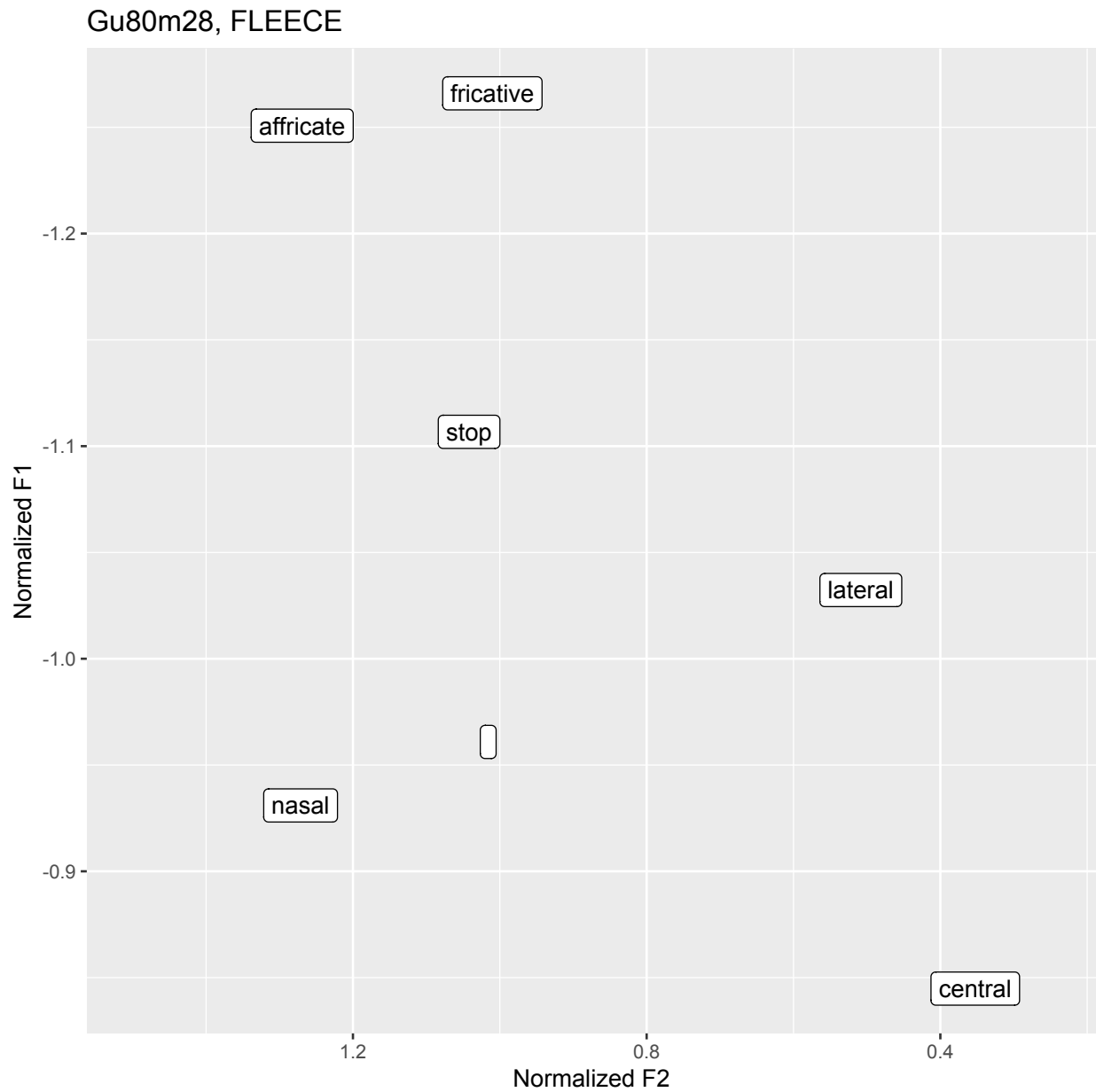


Figure 105 - Linguistic constraints on the vowel FLEECE in Kyle. Tokens occurring in pre-r environments, i.e. pre-central appear to be positioned lower and backer compared to the other phonological environments, which is due to the fact that they would be categorized as NEAR rather than FLEECE in Wells's Lexical Set. (Speaker code: Gu80m28)

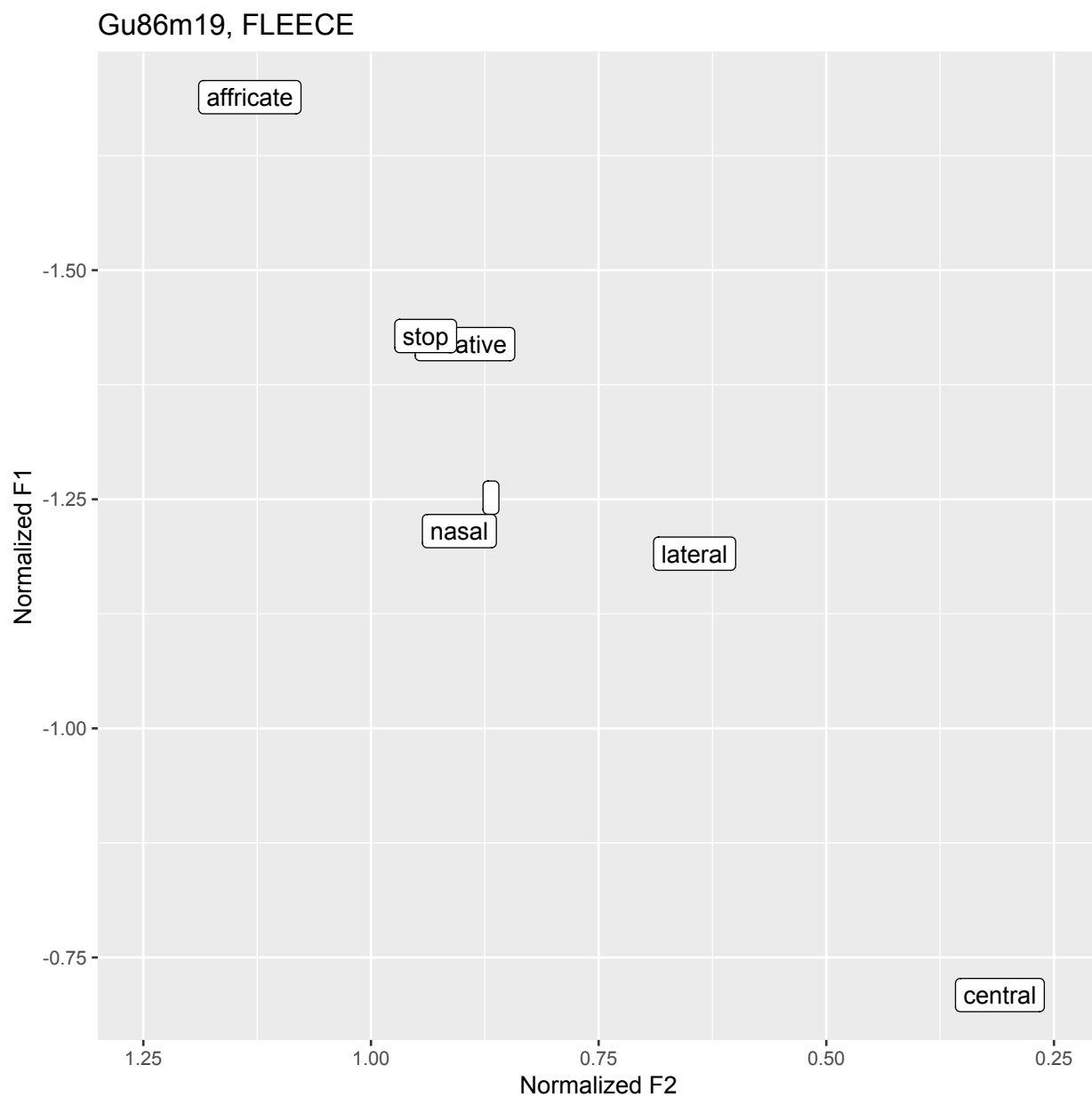


Figure 106 - Linguistic constraints on the vowel FLEECE in Seth. Tokens occurring in pre-r environments, i.e. pre-central appear to be positioned lower and backer compared to the other phonological environments, which is due to the fact that they would be categorized as NEAR rather than FLEECE in Wells's Lexical Set. (Speaker code: Gu86m19)

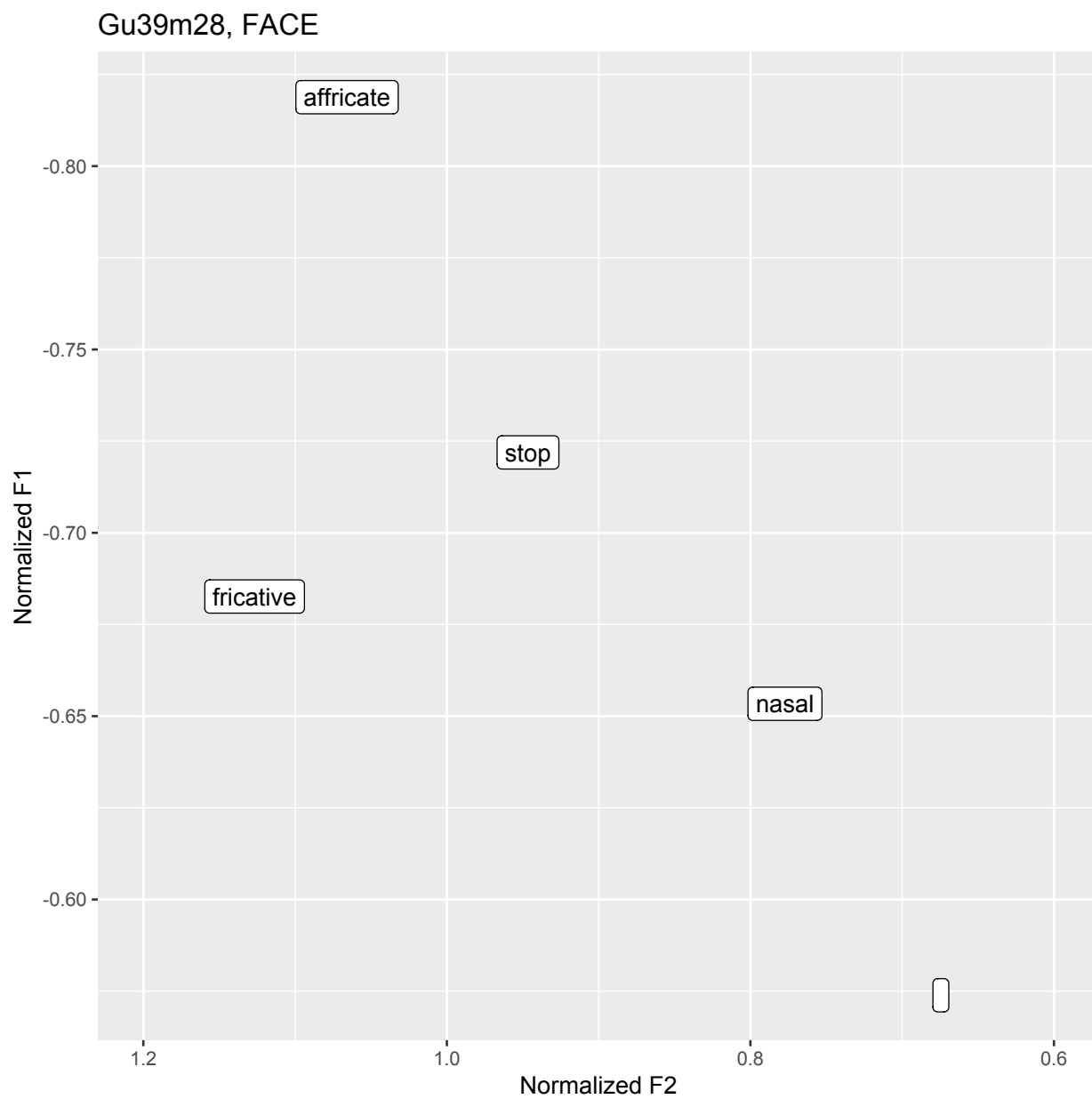


Figure 107 - Linguistic constraints on the vowel FACE in Jack. (Speaker code: Gu39m28)

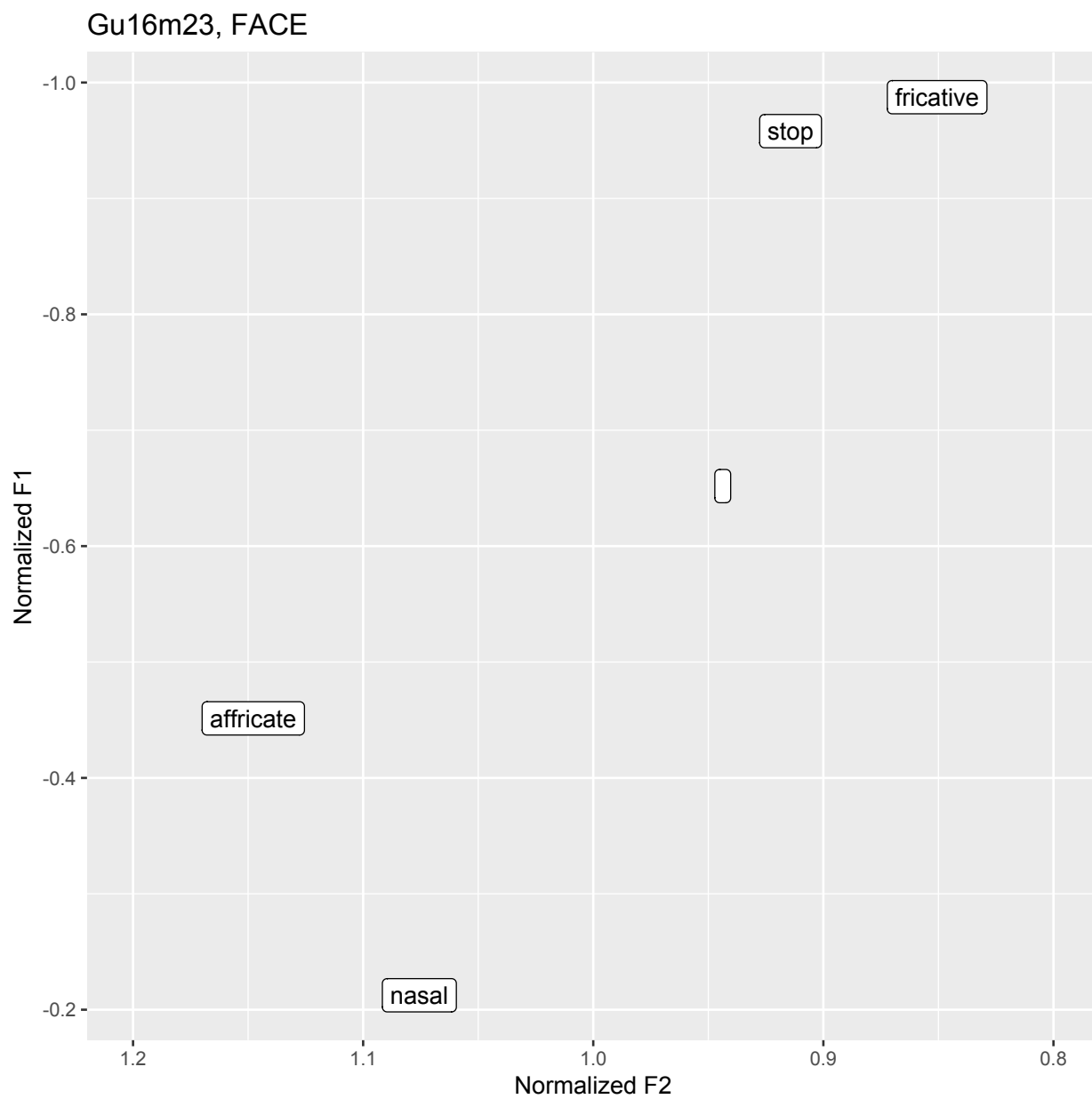


Figure 108 - Linguistic constraints on the vowel FACE in Eric. (Speaker code: Gu16m23)

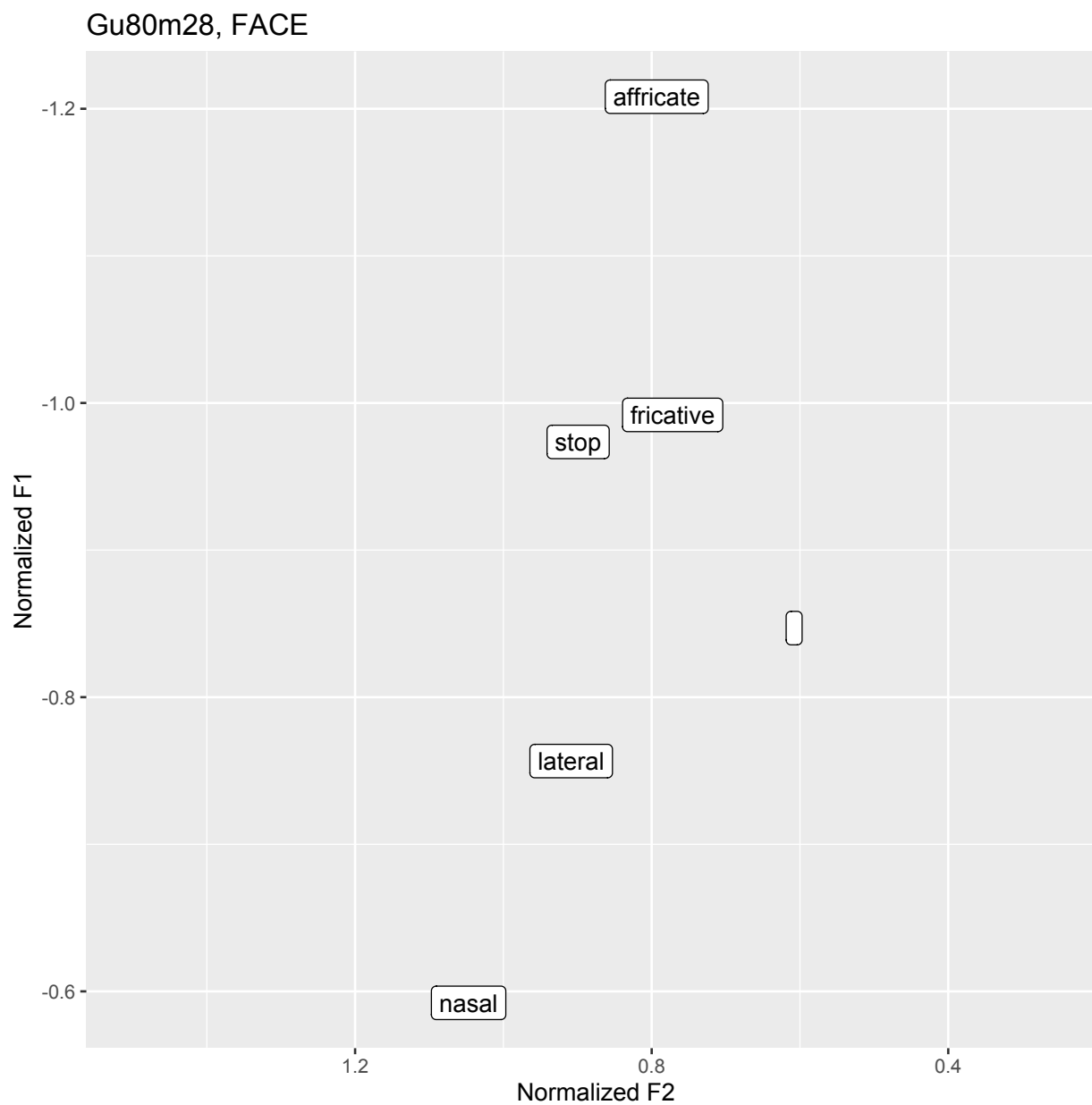


Figure 109 - Linguistic constraints on the vowel FACE in Kyle. (Speaker code: Gu80m28)

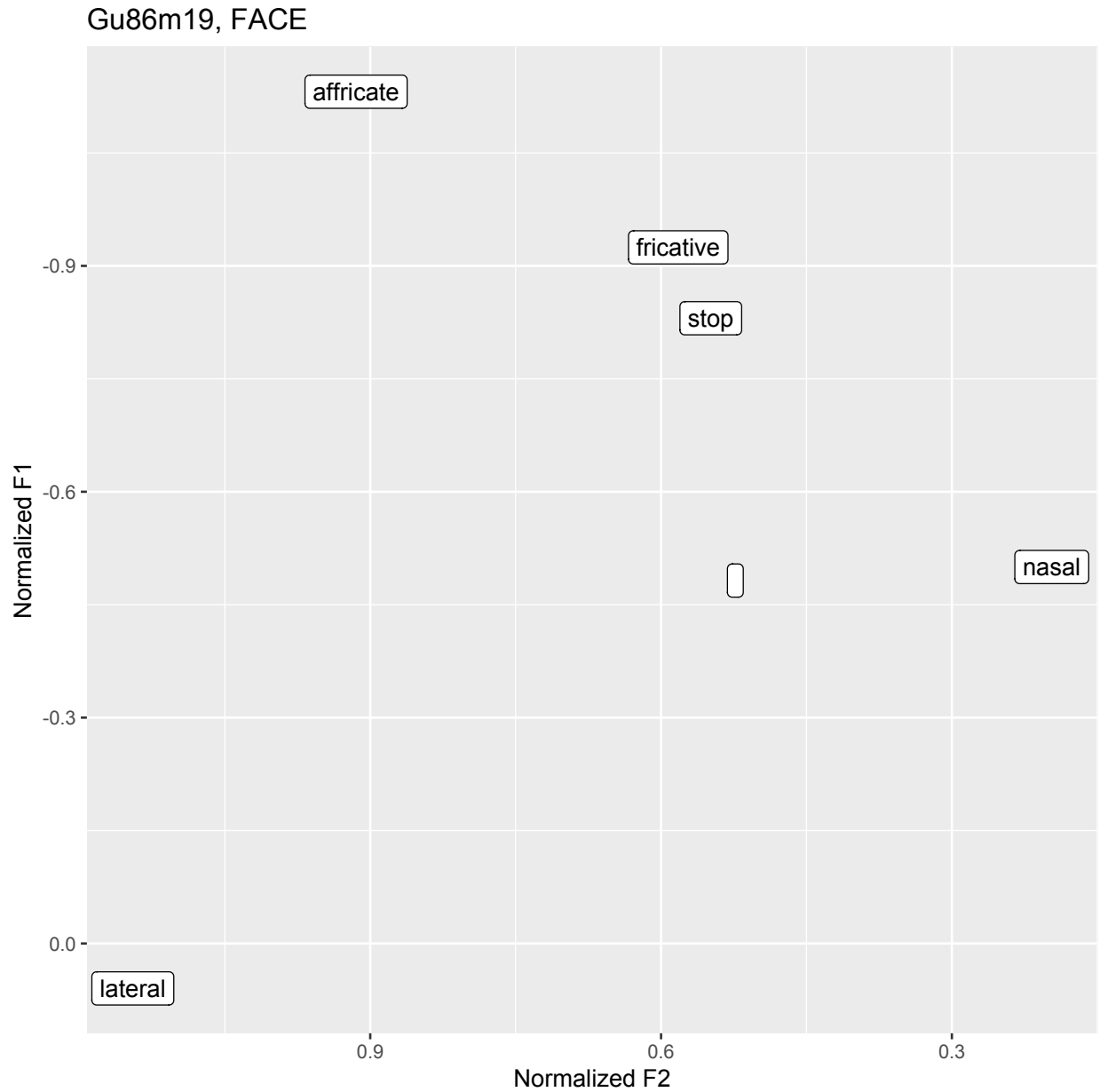


Figure 110 - Linguistic constraints on the vowel FACE in Seth. (Speaker code: Gu86m19)

5.3.5.1.2 Consonants

Based on auditory analysis, the speakers differ in production of only some of the consonants; most frequently it is the basilectal Chamorro speaker, Jack, who produces a non-standard feature. /p/ and /t/ and /k/, for instance, are unaspirated in Jack's speech, but they show aspiration in Eric's, Kyle's and Seth's speech (*time* [taim], [t^haim]). Word-medially and inter-vocally, all four

speakers frequently flap /t/ (*society* [sə'saɪəri], *vertical* ['vɜːrɪkəl]) and a glottal stop for word-final /t/ is occasionally employed by all four speakers (*but* [bʌʔ]).

Jack produces a devoiced [v] word-finally (*move* [muf]), /ð/ is substituted with [d] word-initially (*there* [dɛɪ]) and /θ/ is substituted with [t] in word initial positions (*thing* [tɪŋ]). /dʒ/ is occasionally devoiced to [tʃ] (*language* ['lɑŋgwətʃ]). For all of the above mentioned features, Eric, Kyle and Seth show a standard American English production. Seth, however, frequently replaces /θ/ with /f/ (*with* [wɪf]).

/z/ is occasionally devoiced in Jack's speech (*boys* [bɔɪs]) as well as Kyle's speech (*Chuukese* [tʃu:'ki:s]). For both Jack, Eric, and Seth /l/ is frequently vocalized (*old* [oud]) or produced in a light manner where American English would prefer a dark manner. Kyle, on the other hand, rarely vocalizes /l/ and produces it in a dark manner. Kyle's speech is further distinguishable from the other three speakers, in that his /r/ appears to be produced in a retracted retroflex position, whereas Eric and Seth produce /r/ in a relatively fronted retroflex position.

Eric produces a variant of /s/ which resembles the /s/ reported for the American sociolect frequently associated with younger and gay speech. Mack and Munson (2012, p. 198) report on the quality of /s/ described here as being associated with a "gay lisp" and describe it as a "frontally misarticulated token of /s/, a dentalized /s/, or an /s/ produced with an especially high-frequency, compact spectrum" in s-initial words.

5.3.5.2 Prosody

Jack's intonation occasionally follows a syllable-timed pattern and stressed syllables often coincide with a lowering of pitch. Eric, on the other hand, shows stress-timed intonation and frequent up-talk. Kyle and Seth, similar to Eric, show stress-timed intonation but hardly any up-talk. Kyle, Eric and Seth additionally produce frequent cross-word assimilation (*did not want to* is reduced to [dɪdn̩wʌnə]; *trying to* is reduced to ['traɪndə]), and frequently raise the final vowel of *the* to a FLEECE vowel (*the* [ði]). Seth occasionally shows syllable deletion (*vertical* ['vɜːrkəl]).

5.3.5.3 Morpho-Syntax

Not many non-standard morpho-syntactic features were found in any of the speakers, which does not necessarily prove their absence. Instead, the lack of non-standard morpho-syntax may simply be due to the interviews having been limited to only around 50-90 minutes for each speaker. Jack

generally uses shorter and sometimes incomplete sentences (*just put cigarette, stops the bleeding*) in comparison to Eric, Kyle and Seth, who construct more complex utterances.

I find a few non-standard features regarding the use of tense in Jack's speech, who frequently interchanges past, present simple and continuous, as well as future tense when reporting past events:

You know when *I was* a lot younger and I *do* something wrong and *they're yelling* at me in Chamorro *I understand* everything []. Not, not just my mom, my uncles my aunties, when *I do* something wrong, *they'll yell* at me in Chamorro and *I'll* just *stand* there

The use of present tense in this context is not found in Eric, Kyle and Seth but instead their use of tense resembles standard American English. They additionally frequently use the auxiliary *would* in habitual past, which is not used by Jack:

When I was dropping [Barbara] home, there *would* be, uh, maybe, say, my brother in the car [...] when there was nobody but the two of us in the car she *would* sit in the front. (Kyle)

Furthermore, I find occasional absence of an article in Jack's speech: "he never went to Ø hospital." Though article absence is common for this example in British English, American English favors the use of an article. The other three speakers rarely show this feature. Seth, for example, uses the article in connection with the Philippines, while other Filipino study participants frequently drop the article in this context ("my sister and I haven't been to *the* Philippines").

In all four speakers, I find frequent use of discourse markers. Jack frequently uses the Chamorro discourse marker "nay," which is entirely absent in the other three speakers ("Depends, *nay*, if you move.") Eric and Kyle frequently use the discourse markers "like", "ya", "yeah" and "I guess." Seth similarly uses "like" and "I guess" but only rarely uses "ya" or "yeah."

If we *like* walk out our front door, *yeah* [yeah] just *like* over the tree line not really *like* at the horizon point. (Eric)

You know there's *like* a lot of different err l- *I guess* not really landmarks but other schools and *like* government buildings that- err, *I guess*, contribute to the overall, *I guess*, economy over there. Mangilao is known for its edu-, *I guess*, for its school, so, UOG and GCC are situated there, so *yeah*,

we're the village that, *I guess*, err, where- where both co- the college and university is at so a lot of people, *I guess*, go through there. (Eric)

Uh that was times when she saw *like* one of her husband's friends. (Kyle)

It was *like* after the war. (Seth)

5.3.5.4 Lexis

A number of Chamorro lexis (often of Spanish origin) is used by Jack, though he is not actually fluent in the indigenous language: eg. *fandango* ("party"), *fugu* ("goose bumps"), *lemmai* ("bread fruit"). Eric also employs occasional, but less frequent use of Chamorro lexis (e.g. *Suruhånu* "healer"). Kyle and Seth rarely use Chamorro lexis, but Kyle occasionally comments on the meaning of a Chamorro word, e.g. when discussing the name of a restaurant: "*Pika* is also just a word for spicy." Kyle uses the formerly used English word for Guam's capital, *Hagåtña* (*Agana*), even though the name of the capital has now officially been changed to the Chamorro spelling and pronunciation. The difference in use of lexis of the speakers is likely strongly influenced by the topics that were discussed during the interview.

5.3.6 Summary and Interpretation

In taking a closer look at the linguistic differences found in four Guam English speakers of the same sex and age group, I have shown that despite the many linguistic similarities Guam English speakers share, variation reigns. There is a range of speech styles present, both on the more basilectal, as well as the more acrolectal, standardized side. Social factors that may affect this variability are, apart from age and sex, the speakers' ethnicity and potentially their level of education.

The basilectal speech style is common on the island, but is not necessarily captured in much detail in this research work, as most of the participants used for the overview description of Guam English are more standardized speakers. Jack employs a wide range of non-standard features, many of which are shared with older participants who speak Chamorro as an L1. His non-standard intonation, use of the present tense for past events and frequent employment of Chamorro lexis are just a few examples. In employing the "Chaud" accent, Jack's speech differs greatly, not only from that of other ethnic groups, but also from the acrolectal speech found in the same ethnic group.

Level of education did not prove to be a significant social factor to determine the position of the short front vowels in the quantitative analysis of this thesis. However, the fact that Jack's speech differs greatly from his more educated counterparts hints at a potential influence of this factor, which should be analyzed closer with a larger group of speakers of a low education level.

The three acrolectal speakers presented here, Eric, Kyle and Seth, show variation amongst each other, even if their speech is much more standardized. Eric employs standard American features (e.g. in morpho-syntax), but additionally belongs to the avant-guard group that is possibly developing towards a specific American English variety, as he also employs some features that are specific to a mainland American (regional) sociolect. His low production of KIT and DRESS, the frequent use of discourse markers "like," "yea" and "I guess," as well as the high-rising terminals, are all reported in young American speakers from California (Eckert, 2000; Dailey-O'Cain, 2000). Additionally, the slight lisp in his production of /s/ is reported as a feature frequently associated with gay speech in American English (Mack and Munson, 2012).

While Kyle mostly employs standard American features, he does not produce any typical regional dialect features found on the mainland. His consonant production, morpho-syntax, intonation and lexis, for instance, is almost entirely standardized, but he does not seem to participate in the raising of TRAP as found in many American regions, including the one where his father is from (Michigan) (Labov, Ash, and Boberg, 2006, p. 193). He also does not show many local features, despite the fact that he grew up in a Chamorro community.

Finally, though Seth grew up in a Filipino household, he shows standard American English features (morpho-syntax, lexis) as well as some local features that he shares with many other young Chamorro speakers of the database, such as the back production of TRAP, the light production of /l/, as well as substitution of /θ/ with /f/.

The case study of these four young, male speakers demonstrates several important aspects to keep in mind when attempting an overall description of Guam English. For one, it shows that although generational changes make up the most significant linguistic changes found in Guam, there is variation in all age groups, which should come as no surprise, as variation is an intrinsic part of any language. Secondly, the linguistic differences between the speakers, but also the lack thereof give more insight into the ways in which social factors shape Guam English. Apart from *age* being a significantly influential social factor, the *level of education* potentially has an effect on speech too, if Jack's linguistic profile is shaped by his low education. In regard to *ethnicity*, the

fact that Seth, the Filipino speaker, portrays some local features indicates that Guam English is not a variety exclusive to the Chamorro ethnic group. Younger Filipinos, perhaps as a consequence of advanced social integration with the island community, show alignment with the local variety (which, in turn, shows alignment with American English). Caucasian speakers show a smaller range of local Guam English features, but simultaneously, as demonstrated in the example of Kyle, they do not follow the regional American patterns of their parents. Guam English therefore is shaped, not only by the apparent time changes due to a shift from L2 to L1 speakers of English, but also by other social factors.

5.4 *Developmental Trajectories of Guam English*

In the previous sections, I have elaborated on the fact that Guam English has emerged out of colonial contact with the U.S. and that it has moved from being an L2 variety to an L1, with much resemblance to an American English variety. The goal of this section here is to analyze in what ways both the overview description of Guam English as well as the quantitative analysis of the short front vowels KIT, DRESS and TRAP can provide further insight into this developmental pattern. This may help to establish *which* American variety is most likely to function as a target that Guam English speakers orient toward.

Suggesting that Guam English is simply moving toward a standard variety of American English is problematic. For one, the definition of what a standard variety is, is debatable. It varies depending on the geographic location, it can be used in writing, printing and teaching but isn't always, and, finally, it is not simply the variety that is spoken by a majority. On the contrary, only a very small part of society actually speak something close to a standard (Trudgill, 2011). In a country the size of the U.S., with its variable settlement history and vast ethnic diversity, the use of regional varieties is much more prominent than any version of a standard. It is therefore also likely that it is actually a regional or ethnic variety that is influencing new Englishes that emerge out of contact with the U.S., rather than a standardized one.

In the Theoretical Framework chapter, I have described a number of American regional Englishes that are likely to have influenced Guam English. The selection was based on Guam's biggest diaspora communities in the U.S. and closest contacts with American English speaking social groups. The people that migrate from Guam to the U.S. mainland are most likely to settle in California, followed by Texas and Washington State. Furthermore, many migrate to Hawai'i. An increase in social ties and communication between Guam and those U.S. regions may result in linguistic influence on the island. Of particular influence on language change induced by language contact may be those groups that reside in the U.S. for a long time, or perhaps were even born and raised there, but then return to Guam. They may be the ones that Guam locals to some extent adapt to through social network ties, though at this point, this possibility is only a speculation.

The comparison of both the overview description of Guam English as well as the short front vowel development found in Guam English to that found in the American regional Englishes of interest, reveals that younger Guam English speakers show many similarities to an ethnic variety

of California English. Similarities to Hawai'i English vowel developments are also found, though those may also be traced back to California English being a target variety. Guam English is, however, less like the English spoken in the American South and Washington State, which are both additional target regions for migrants between Guam and the U.S. mainland.

5.4.1 *Guam English and California English*

As described in *Chapter 1 – Theoretical Framework*, California English short front vowels follow what is termed the California Vowel Shift, where a retraction of KIT and DRESS is reported, which is led by female speakers. This development is found for various ethnic groups, with the exception of one feature: Caucasians show a nasal pattern of TRAP in that the vowel is raised from its previous central position before [n], [m] or [ŋ] and lowered in all other environments. Other ethnic groups don't follow this pattern in the same way. Chicanos, for example, retract TRAP from its central position in all phonetic environments without a clear nasal pattern (Eckert, 2008). Furthermore, Cheng, Faytak and Cychosz (2016) find California Korean Americans and Chinese Americans to be producing TRAP in a more retracted position compared to Caucasian Americans, with a less pronounced nasal split.

Guam English speakers show a similar pattern to that documented in ethnic groups of California. A retraction of DRESS and KIT is found in younger speakers and TRAP remains in its low back position, both in pre-nasal and pre-oral environments. Those similarities suggest that Guam English speakers may be assimilating toward an ethnic California English variety.

Guam English is not the first variety that is theorized to assimilate toward California English based on short front vowel developments. Hawai'i English, for example, is potentially participating in the California Vowel Shift. Speakers show a general retraction of KIT and DRESS, and they produce a saliently low and back TRAP, even in pre-nasal positions (Drager, 2012, 2013). The researchers have some remaining doubts about the assimilation to California English, due to the fact that *males* appear to be leading the vowel change in Hawai'i, while *females* are at the avant-guard of the California Vowel Shift. Furthermore, the development in Hawai'i also shows a connection to the speakers' self-identification as pidgin speakers.

Suggesting that Guam is adapting to an ethnic variety of California English solely based on short front vowel trajectories may be a bold claim, especially considering the fact that the California Vowel Shift has become a wide-spread phenomenon found in major areas of the U.S.

and even Canada (hence why it is also often referred to as the Canadian vowel shift) (e.g. Boberg, 2001; Durian, 2012; Bigham, 2009). This would raise doubts about claiming that it was just one specific area that has influenced Guam English and not others.

The quantitative findings of the short front vowels need to be discussed in light of the general overview of Guam English. Based on this, the claim that Guam English is assimilating to ethnic California English does not seem so far-fetched: When I played recordings of younger Guam English speakers to American variationist sociolinguists, many mentioned as a first, overall impression that the variety “sounds like ethnic California English.” This impression is likely not based on the short front vowel production alone, but other features as well. Compared to Fought’s (2003) description of a Californian Chicano community, for instance, Guam English shares further features with the variety. In her analysis of young adult native English speakers of Mexican heritage living in Los Angeles, Fought describes phonological and morpho-syntactic features. In regard to the phonological production of Chicano English speakers, she notes FACE and GOAT to be frequently realized as monophthongs (*ago* [əgo], *LA zoo* [əlezu]), interdental fricatives [θ] and [ð] are occasionally replaced by stops (*something* [ˈsəmtʰɪn]), (*then* [dʒen]) and consonant clusters are frequently reduced (*least* [lis]). An additional phonological feature is pointed out by (Eckert, 2008), namely the light production of /l/. All of these phonological features are shared between Guam English speakers and Chicano California English speakers. The morpho-syntactic features that Fought points out are some that Chicano English shares with African American Vernacular English (e.g. the use of habitual *be*, or the use of *ain’t*), a connection that I did not find for Guam English speakers, as the younger speakers in my corpus are much more standardized in regard to their morpho-syntax. One morpho-syntactic features that the Chicano English variety shares with older, more non-standard Guam English speakers is the subject-auxiliary inversion in embedded questions (“then they ask them where did they live.” (Wald, 1984, p. 25).

Features of young *Caucasian* California English speech are distinctly recognized as such by Guam’s inhabitants: Up-talk and the prominent use of “like” as a discourse marker, for example, were often jokingly discussed by my study participants as being typical of California valley girls’. They were happy to announce that they themselves were not using those features (although I did find them in many young speakers). This is much like what Eckert (2008) describes in her fieldwork experience in a California school where a majority of the students are of Latino ethnic background: Eckert recounts the reaction of a young, male Chicano student who points out that

the girl with the most valley-like intonations in his class is unpopular: “I hate her—why can’t she talk normal?” (p. 25). Eckert concludes that “valley girl” California English is disliked in the Latino ethnic community. Perhaps a slight dissociation of Guam English speakers with Caucasian California English speakers may have favored an assimilation with a different California ethnic group, e.g. Chicanos or Asians Americans, although some features are also variably shared with Caucasian Americans.

The assumption is further based on the likely social connections of Guam English speakers with Chicano communities in California. Those Guam English informants that have lived on the mainland have repeatedly pointed out that they are initially assumed to be of a Latino ethnic background: “when you’re in the mainland, like, sometimes people will try and speak Spanish to me or like- people from Guam, because they’ll think that we’re like Hispanic or Latino” (young male Chamorro, Gu25m18, born around 1998). As a minority group from an ethnic background, it is plausible that Chamorro diaspora communities in California associate with other ethnic minorities.

5.4.2 Guam English and Other American Regional Englishes

While Guam English shows various similarities to California English, it remains distinct from other U.S. mainland regional Englishes that similarly function as target regions for diaspora communities.

The vowel changes found in the short front vowels of Washington English, for example, appear to be developing in the opposite direction of the changes found in California, Hawai’i and Guam: While KIT remains constant, DRESS and TRAP are in the process of being raised, including in pre-velar environments (Beckford Wassink, 2016). Consequently, I conclude that even though there are larger diaspora communities of Guamanian Chamorros living in Washington, the changes that are happening in Washington English do not seem to have an effect on the Guam English short front vowels at large. Perhaps the weight of contact between California, Hawai’i and Guam, which all share a rather similar vowel constellation is simply more dominant than the connection to Washington, which shows contrastive vowel developments.

Similarly, the vowel shifts reported for Southern American English do not resemble those found in Guam. In fact, they are moving in an opposite direction. KIT and DRESS are both reported to be raised or even merged in Southern English (also referred to as PIN/PEN-merger)

(Clopper, Pisoni and de Jong, 2005)⁵⁸. The reported diphthongization of TRAP from [æ] to [ɛə] in all phonetic environments (Labov, Ash and Boberg, 2006) is not found in Guam English. Although the Texas region, where a majority of Chamorro Guamanians reside, deviates to some extent from Southern speech, it also does not show close similarities to Guam English. The lack of KIT/DRESS merger found in this Southern variety is also present in Guam English, but it is unlikely to be explained as a result of contact with Texans, as the lack of this merger is a standard language feature found in a majority of regional Englishes. I therefore assume that the short front vowels are not significantly affected by Southern speech or more specifically, by Texas English.

However, there are indications that other vowels show similar patterns to Southern English. One example is the rather low and back pronunciation of /ɑ/ (reported in Thomas, 2008), which I find in both younger and older speakers of Guam English in word-final position (e.g. *grandma* ['grɑmɑ]). A more in-depth quantitative analysis would have to be done to elaborate further on the similarities between the developmental trajectories of the vowels in both varieties. In other linguistic categories, such as lexis, I also find potential similarities with Southern speech. *Y'all*, for example, is used occasionally by younger speakers ("y'all losers can't speak any Chamorro, so I give no shits, right"). The stress marking on the initial syllable in words such as "ID" is found both in Guam English as well as in Southern speech (Preston, 2017, personal conversation). For Guam English, however, this pattern can also be explained by substrate language influence of Chamorro, where the penultimate syllable is stressed.

To summarize, perhaps as a results of close social contact with the respective region, Guam English short front vowel development shows similarities to the vowel developments reported in California English. More specifically, Guam English shows similarities to an ethnic variety of California English speakers. This is not only based on the short front vowel developments, but also on other linguistic features. Guam English also shows similarities to Hawai'i English, which may be connected to a similar assimilation to California. Guam English shows clear distinctions to Washington English and Southern American English, despite the fact that those mainland regions are also main target areas for migration.

⁵⁸ Although a merger of KIT and DRESS similar to the one described for Southern American English has been reported for some regions in California (e.g. Bakersfield) a potential demerger due to effects of the California vowel shift make this feature less prominent in younger generations (c.f. (Warren & Fulop, 2014))

6 Discussion and Conclusion

In this final chapter, I turn to focus on the interpretation of the various findings that I have presented in the previous chapters. The goal of the dissertation was to answer five main research questions. The first was concerned with the socio-historical account of and reasons behind the emergence of English in Guam, the second focused on a general, as well as a more detailed linguistic description of Guam English.

1. How did English emerge in Guam, socially, historically and linguistically?
2. What is the phonological, morpho-syntactical and lexical structure of Guam English?

The two questions are, as pointed out in previous sections, connected and intertwined in many ways. The historic and social circumstances that were responsible for the emergence of Guam English simultaneously determined the way the language evolved and hence what its linguistic structure is today. In answering and discussing the first two questions here, I will lay the necessary groundworks to answer the third research question, which is concerned with potential developmental patterns of Guam English toward a general, regional, ethnic or social variety of American English:

3. In what ways is Guam English converging toward the variety of its colonial power?

The discussion of the third research question requires a focus on general patterns, rather than individual observations. To remind the reader of the vast amount of variation present in Guam English, the fourth research question will then be discussed at length:

4. What factors shape linguistic variation in Guam English?

A general overview of the socio-historic emergence of Guam English, its linguistic structure and developmental trajectory, along with the knowledge of internal variation, will provide the necessary characteristics to finally place Guam English in the various models proposed to structure the developmental statuses of World Englishes. With that, the fifth research question will be answered:

5. How can Guam English be categorized within a constellation of previously described World Englishes?

Though the above stated research questions will be discussed individually, not all of them can be answered in a short and conclusive way. Many aspects that provide answers to the questions have already been presented at various stages of this work. The intent of this final part is rather to summarize and draw general conclusions from those findings.

A summary of important events in the social history of Guam will show that it is mainly the changes in the post-WWII generations that have led to a likely irreversible language shift from Chamorro to English. Those same historic events are reflected both in the overall linguistic structure of Guam English, as well as in the more detailed developmental presentation of the short front vowels. They are particularly visible in the salient linguistic difference between the oldest segment of Guam's population, the *Manåmko'*, and the post-war generations. It was especially during those post-war years that the variety started showing significant structural changes towards the language of the colonizer, the U.S.

Guam English is showing signs of linguistic convergence toward an American English. There are a number of shared features between Guam English and ethnic varieties of California, which the locals are in contact with most when they travel to or resettle on the mainland. In the following sections, I will shed light on this overarching pattern within the discussion of all five research questions. At the same time, I will stress that those developmental trajectories do not follow an entirely clear path, as there has been and continues to be a great amount of variation in Guam English, which is only somewhat determined by social factors, such as age, gender and ethnicity, but in many cases is also shaped by additional factors that were not clearly determined.

6.1 *Research Question One: How Did English Emerge in Guam, Socially, Historically and Linguistically?*

I have given a detailed account of the history of Guam and the arrival of English since the beginning of colonial contact with the U.S. in *Chapter Two – Socio-Historic and Linguistic Context*. The goal of this section is to point to those historic events in Guam that were likely most

influential for the linguistic findings stated in the results section. The most effective changes happened in the 1950s, during the second American administration period, when Guamanians were legally granted American citizenship with the signing of the Organic Act in August of 1950. I will focus on this period here, as it is during this time that the switch from English as an L2 to an L1 took place in the local population. This switch, as I will later argue, is also visible in the linguistic data, both in the overview findings as well as in the quantitative analysis of the short front vowels.

After the return of the American administration post-WWII, changes in the public school system were set to reflect stateside standards. Guam also established its first institution for higher education in those years, a junior college for elementary school teachers. Classes continued to be in English, as had been the norm before the war, but Chamorro was no longer forbidden (Rogers, 1995, p. 225).

Around the same time, television with American programs was established, which also makes up a crucially influential factor for the development of the English language. In 1956, the media station KUAM broadcasted the first television program and the effects on the locals were described as follows:

The advent of television in Guam had a varied and decisive influence on the culture. Peyton Place became the favorite soap-opera fix for many years. Students learning English watched Password faithfully. Village children immersed themselves in the Old West craze that was making the rounds stateside. Many a child was seen riding tangantangan horses and shouting 'Hallicop! Hallicop!'. This word resulted as a misunderstanding of the saying used often on Gunsmoke and Bonanza - "Giddyup!"

Network television shows were air-mailed to Guam, and normally aired here about a month after they left the states. Often the station had to fill space for late-arriving programs, usually with educational, business, or military films. At the time, and for several years after, KUAM couldn't afford the additional expense of daytime programming. (Nelson, 2009)

The report suggests that the American programs had a significant cultural influence on the islanders, who apparently celebrated and reenacted the captivating storylines of Password, Bonanza and the like. This included imitating the most famous lines in English, which indicates that the increased exposure to mainland American English influenced the locals' use of English.

With Guam's inhabitants becoming American citizens in the 1950s, their mobility increased: "Entire Guamanian families, not just men, began to move to the mainland [...]. Gradually over the next decades, [...] thousands of Guamanians, some of them the best educated, departed to live permanently in the states [sic.], where higher wages and living standards offered more opportunities than Guam" (Rogers, 1995, p. 225). With increasing mobility comes increasing

language contact. In this case, it was language contact between the L2 English speakers coming from Guam and L1 American English speakers who assumingly represented the desired target language. It is possible that through this contact, the variety spoken by Guam English speakers who had relocated to the U.S. became increasingly stigmatized and because of that, linguistic accommodation and convergence toward a more standard American variety was induced. Through remaining social ties to Guam, this more standardized Guam English may have become even more of a target language to those family members who stayed on the island. Further research should look into the language development of Guamanian diaspora communities on the U.S. mainland and their remaining social ties to the island. This would help to better understand the linguistic influences that may have caused language change in Guam due to increased mobility toward the U.S. mainland.

Finally, Santos-Bamba (2013) finds attitudinal change toward English and Chamorro in her analysis of three generations of Chamorro women. She finds that the generation that was born between 1945 and 1965 had the most positive language attitudes toward English and the least positive attitudes toward Chamorro. These women were among the first that entered the workforce and English was the language that ensured their economic success. They report Chamorro as their first language but apparently “they believed that Chamorro had little use in situations beyond religious and home domains” (p. 87). They conversed with their children in English and only used Chamorro when they did not want their children to understand or when they were upset. Santos-Bamba puts this generation’s attitudes toward Chamorro in stark contrast to the other two generations that she analyzed: the generation before them was fluent in Chamorro and spoke the language despite it being forbidden in the public sector. The generation after them, returned to seeing the value of both languages, perhaps initiated by the fact that Chamorro had become an endangered language. The more positive attitudes of that early post-war generation toward the English language may have been engrained in them because of the harsh wartimes that their parents had gone through and the impression of the American administration as the “hero” that freed them from the Japanese occupation.

The following quote perhaps most accurately explains the crucial changes happening during the second American administration:

In spite of symbolic strides by Chamorros, by the late 1960s the Americanization of Guam was becoming irreversible in cultural as well as in political matters. Although *i kostumbren Chamoru* continued in village saint-day fiestas and in many other traditional activities [...] island young people were becoming more American with every graduating class from the high schools and the college. (Rogers, 1995, p. 240)

At this point, the question of how English emerged in Guam is one that I can conclusively answer. It was not just *one* factor that caused the change in people speaking English as a second language to speaking English as a first language. Instead, it was a mixture of *several* factors and historic events that contributed to this process. The groundworks were perhaps already laid during the early periods of American colonialization, when the English language was strictly enforced through language policies. However, the most significant factors that caused the emergence of English all occurred around the 1950s, when not only the education system reflected American standards, but increasing mobility and social contact to the mainland U.S. facilitated linguistic contact to more standardized American English. This includes not only physical mobility, but also technological mobility, i.e. the exposure to American media. This all led to the inhabitants developing a positive attitude toward the colonizer and their language which ultimately convinced many of the locals to raise the first generation of L1 Guam English speakers. This resulted in a significant change between Guam's oldest inhabitants, the pre-war generation and the post-war generation. I will refer back to these findings when I move on to discussing the second research question, as the linguistic changes in Guam English can be interpreted as a reflection of these most significant historic events.

6.2 *Research Question Two: What Is the Phonological, Morpho-Syntactical and Lexical Structure of Guam English?*

In answering this second research question, I will cover a broad range of developmental patterns found in the linguistic structure of Guam English. The developmental patterns can be viewed as a reflection of Guam's socio-cultural historic development. An extensive description of Guam English was given in the results section in the form of a linguistic overview, a quantitative analysis of the short front vowels, as well as case studies focusing on variation and social stratification in the variety (c.f. *Chapter 4 - Results*). For each section, tentative interpretations of the social meaning of those results were given. The aim of this section is to interpret the findings further, in

a combined way, and to make tentative conclusions about the linguistic patterns of Guam English as a newly emerged variety of English. The most salient characteristic of Guam English, namely its rather recent and rapid development from an L2 to an L1 language will be at the center of this discussion.

Structurally, I will divide this section into two foci, which resembles the structure of the first two parts of the results section. First, I will interpret my general, linguistic overview of Guam English and revisit the social and developmental patterns, many of which are a reflection of the historic changes that happened in the 1950s. The main evidence for the language shift from an L2 to an L1 variety of English is found in the loss of substrate language influence and in the gradual assimilation towards American English. In a second part, I will discuss how this development from an L2 to an L1 variety is also shown in the short front vowel production of Guam English speakers. The assimilation toward an American English can be discussed in more detail here, as the apparent time changes found in the short front vowel production, but also other linguistic structures of Guam English resemble those found in American English, with a number of features that are shared with ethnic varieties found in California English.

6.2.1 General Findings of the Linguistic Overview of Guam English

In this first section, I interpret the overview description of Guam English (c.f. Chapter 4 – Results, Part 1). I focus on the evidence I find for a development of the variety from being an L2 to an L1, influenced by American English. The most salient evidence is the loss of substrate language influence in younger Chamorro speakers. Older Guam English speakers, who still consider Chamorro their first language, but speak English as a highly proficient second language, employ a considerable number of non-standard English features that were most likely influenced by the substrate language. The English of those younger groups, in turn, resembles an American norm, or potentially an American regional or ethnic norm. A similar loss of substrate language influence is found in the Filipino ethnic group. The linguistic features reflecting this shift are listed below, covering phonetics and phonology, morpho-syntax, as well as lexis.

It's important to note here that when discussing the English variety of “older” speakers, I am referring to the oldest segment of the data, namely those speakers born before the 1950s who still consider Chamorro (or a Filipino language) to be their L1. In Guam's community, they are often referred to as “Manåmko” – the elders. A great majority of the features has disappeared in

the speech of “younger” speakers, including anyone born past the 1950s, who speak English as a first language and have only limited knowledge of Chamorro. The term “younger” is only used to contrast the oldest segment. It does, however, include informants ranging from around the age of 16 to around 67.

6.2.1.1 *Substrate Language Influence and the Disappearance Thereof*

The following non-standard features found in Guam English and described in *Chapter 4 – Results, Part 1* are likely a result of substrate language influence and are especially commonly found in older speakers but less common in younger speakers:

- The stress and intonation patterns of the oldest segment of Guam English speakers show resemblance to Chamorro. Particularly the stress on the penultimate syllable in a multi-syllabic word is likely to be a remnant of the substrate language. Furthermore, Chamorro intonation, i.e. the frequent non-terminal junctures that increase a sing-song-like rising and falling of the pitch (Topping, 1973) is found in those older generations.
- The Chamorro vowel system is likely to have affected vowel productions in older Guam English speakers. In regard to the vowels KIT and FLEECE, for instance, Chamorro prefers FLEECE in stressed syllables unless followed by a consonant in the same syllable (Topping, 1973). This would explain the frequent overlap of KIT and FLEECE in L1 Chamorro speakers of Guam English. Furthermore, Chamorro does not have the two diphthongs GOAT, FACE, which would explain the tendency of those two features being monophthongized in Guam English.
- Regarding the consonants, the lack of aspiration of /p, t, k/ is noted as a feature of Chamorro, and is found in the older Guam English speakers. Similarly, the devoiced production of /b, d, g and v/ is found word-finally in both Chamorro and older Guam English speakers. /θ/ and /ð/ are not listed as phonemes existing in Chamorro (Topping, 1973), which might explain their replacement with /t/ and /f/ respectively in older speakers. Similarly, /ʃ/ and /ʒ/ are not part of the Chamorro repertoire which might explain their replacement by /s/ in older Guam English speakers. Furthermore, consonant cluster reductions and vowel insertion in consonant clusters are likely a result of the distributional limitations for consonants in Chamorro that function as follows: voiced stops (/b, d, g/), affricates (/tʃ, dʒ/), liquids (/l, r/), /p/ and /h/ do not occur word-finally in Chamorro

(Topping, 1973, p. 36). Additionally, Chamorro consonant clusters are limited to two consonants with one of the two consonants having to be a liquid (/l, r/) or a semi-consonant (/w/) and no consonant clusters occur word finally (Topping, 1973). This may be the reason for occasional insertion of vowels found in word-medial consonant clusters of Guam English (*chocolate* ['ʃɔkələt]).

- Morpho-syntactic features of the substrate language that may have influenced Guam English are the use of present tense to refer to past events (“Before the war, we live in Agana”). In many examples, the lack of past-tense marking could be explained as a final consonant cluster reduction or subject-verb disagreement. However, since Chamorro does not have a past tense and since the use of historical present also occurs in contexts where neither of the alternative explanations are plausible, I conclude that this feature is a result of substrate influence. Another morpho-syntactic feature that is likely to come from the substrate language is the interchangeable use of male/female pronouns, as Chamorro does not make a gender differentiation for the pronouns. This feature I could only confirm in the oldest segment of my Guam English informants. Older speakers also occasionally use emphatic reflexives with “own”, which is likely a transfer from Chamorro, where the possessive pronouns are attached to the preceding word (ka’reta [kaɾetæ] (car) kare’ta-hu [kaɾetæhu] (my (own) car)). The same demographic uses non-standard forms of pluralization (“I take care of all those *mails*”).
- Finally, an evident influence from the substrate language is the persistent usage of Chamorro lexis (many coming from Spanish), such as terms referring to kinship (*chelu, pari*) or food (*lemmai*) (c.f. section 5.1.4 - *Lexis*).

Similarly, the older Filipino speakers in my data employ features in their English that were likely influenced by a Filipino substrate language and/or Philippine English. To name only a few, the trilled /r/, the production of TRAP as [a] and the frequent substitution of [f, v] with [p, b] are all features I found in older Filipino speakers.

A majority of the younger speakers does not regularly employ the above listed features. Particularly the morpho-syntactic forms, such as the lack of gender differentiation for the pronouns and the non-standard plural forms have disappeared in younger speakers. The phonetic/phonological production, as well as the morpho-syntax and prosody of younger Guam

English speakers is much closer to an American norm when comparing them to the oldest speakers in the data, as will be discussed in the next section.

Based on this noticeable difference between L2 and L1 speakers of Guam English, the substrate influence found in L2 speakers could be explained as an intrusion, i.e. as language “errors” that can be explained by the fact that the oldest segment represents non-native English speakers. This issue will be discussed in more detail in *section 6.4 - Research Question Four: What Factors Shape Linguistic Variation in Guam English?*, as it is based both on the overview description of Guam English as well as the analysis of the short front vowels and the case study of variable Guam English speakers. That same section will also further discuss the fact that while many younger speakers show loss of substrate language influence, some remains in all generations.

6.2.1.2 Convergence to an American norm

A wide range of Guam English features used in younger speakers resembles those of an American (regional/ethnic) norm. In terms of morpho-syntax and lexis, forms deviating from American English are rare and are most commonly found only in the oldest segment of the data. While older speakers still regularly use the third person pronoun of both genders interchangeably, for example, younger speakers stick to standard usage. The use of present tense to refer to past events is another example that appears to have been lost by younger generations, in exchange for the more standard version. In terms of consonants, the pronunciation of a clearly rhotic /r/ and inter-vocalic t-flapping suggests influence from American English. The vowel production of younger speakers in many ways resembles American English. Younger speakers tend to, for example, produce LOT/THOUGHT vowels in a merged position.

Furthermore, there are aspects of Guam English that resemble not only a standard American English variety, but also share similarities with regional, ethnic and social variations. The frequent use of *like* as a discourse marker is one such example. Although this feature is now widespread, it is a feature that adds to the “character type” of the typical laid-back Californian and is frequently associated with young speakers of the region (Podesva, 2011). As the next section will show, the production of the short front vowels KIT, DRESS and TRAP additionally show similar patterns to this U.S. region, particularly in connection with *ethnic* developmental trends.

At this point in the discussion, I can answer the second research question only superficially in stating that Guam English varies greatly between older and younger speakers, but mostly between the oldest segment, the Manåmko', and the post-war generations. The oldest segment shows L2 language features that, for the most part, are not found in the generations born after 1950. The youngest speakers, on the other hand, show features that are generally associated with American English and even potentially with an American regional English. It is the combination of both the linguistic overview and the quantitative analysis of the short front vowels that will allow me to make a more wholesome conclusion about Guam English characteristics and its potential development toward an American norm.

6.2.2 General Findings of the Quantitative Short Front Vowel Analysis

The development of Guam English from being spoken as an L2 to an L1, alongside the persistent linguistic influence coming from the U.S., has caused the variety to change significantly. A detailed account of this change was shown in the quantitative analysis of the Guam English short front vowels. The analysis has shown that the social factor *age* has a significant influence on the position of the short front vowels KIT and DRESS. This finding indicates that changes in Guam English are happening in apparent time. The social factor *sex*, interacting with *age* also showed a significant effect on the vowel position. The changes in apparent time might therefore be socially stratified.

6.2.2.1 Apparent time change

The results of the short front vowel analysis show that the social factor *age* significantly influences the position of two of the three analyzed short front vowels in the vowel space. The production of KIT and DRESS is retracting in apparent time, as younger speakers produce the vowels in a lower and backer position compared to older speakers. TRAP does not show lowering in apparent time, perhaps due to its already low and back position in all age groups. The reference vowel FACE is produced in a higher and fronter position by younger speakers and the reference vowel FLEECE shows inconsistent variation in apparent time. All five analyzed vowels vary in position depending on their phonological environment and the production of DRESS as well as FLEECE potentially depend on the social factor *sex*.

What stands out in the noted change in apparent time is a shift in vowel production pattern of the oldest segment of the data, aged 60 or older, compared to the rest of the data. As previously pointed out in *Chapter 4 – Results*, the production pattern for all three of the short front vowels and the two reference vowels appears to level out and stay relatively constant in the speakers below the age of 60, whereas it is changing in a much steeper pattern for the oldest segment, the Manâmkö'. This pattern is highlighted in fig. Figure 111 - A reproduction of fig. (figure below) (a reproduction of fig. Figure 46). What I conclude from this pattern and the corresponding data is that the most significant changes in Guam English must have occurred not recently but more so in the generations raised 60 years ago, i.e. in the speakers that were born soon after WWII and went to school in the nineteen sixties. These changes in the short front vowels and their two reference vowels are likely a reflection of the historic events at that time.

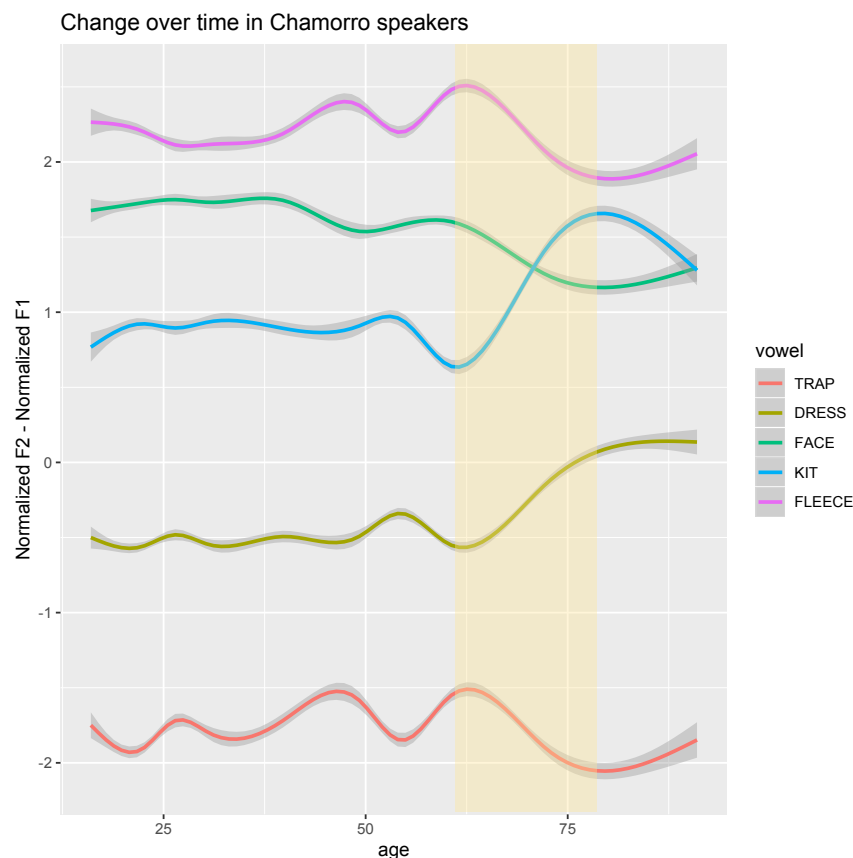


Figure 111 - A reproduction of fig. 46 (c.f. *Chapter 4 - Results, Part 2*): Change over time in Chamorro speakers for the three short front vowels and their two reference vowels. Note the changing pattern of the post-war generation of speakers (approximately between the ages of 60 and 75), highlighted in yellow, compared to the younger generations.

6.2.2.2 *Social stratification*

Apart from *age*, other social factors were included in the quantitative analysis of the short front vowels, some of which showed an additional effect on the position of the short front vowels. This suggests that the change in apparent time may be socially stratified. However, results concerning social stratification need to be interpreted with care, as the dataset was, for one, not entirely evenly distributed in regard to *level of education*. Secondly, the social factor *sex* only just reaches significance for the vowel DRESS and FLEECE; and finally, a number of other social factors that were given less attention in this project may influence vowel production additionally.

6.2.2.2.1 *Sex*

Sex was found to be a significant social factor influencing the position of the short front vowel DRESS and the reference vowel FLEECE, in interaction with *age*. Older females produce DRESS in a higher and fronter position compared to the rest of the speakers in the data. Younger females, on the other hand, appear to produce the vowel in a low back position (c.f. fig. 55). The vowel production of the male speakers in the data appears to be spread out a bit more, including lower positions, but no male speaker approaches the high front vowel production of the four oldest females (Gu44f91, Gu55f83, Gu58f80, Gu12f73). I additionally found a gender difference in connection with *age*, which could indicate that either males or females are the leader of an ongoing change. Previous language research in all areas of the world has shown that this is frequently the case. Most commonly, linguistic change is led by young females (c.f. *Chapter 3 - Methods*, Trudgill, 1983; Coates, 1986; Cameron and Coates, 1988; Labov, 1990, p. 205; Fasold, 1990; Kennedy and Grama, 2012). The stark contrast between the oldest segment of female speakers and the younger ones may be due to several reasons, most of which have already been discussed up to this point. The oldest females in the dataset belong to the pre-WWII generation and therefore may follow linguistic patterns that are influenced by the substrate language, Chamorro, whereas the post-war generations are the ones who were raised in English, joined the workforce and had more access to a standardized American English. The reason why older males don't appear to produce the same high front DRESS vowel as older females may be because women in pre-war times were more likely to stay on the island, while the older males in the data were mobile due to their military service years and therefore were in contact with outside influences (e.g. during the Vietnam War).

As mobility became accessible for both men and women in more recent years, young females may have been influenced in a similar way, and therefore show vowel productions distinct from their older counterparts and in a similarly (if not more) low back position.

The retraction of the DRESS vowel in young female speakers is audible in the recordings and had stood out to me as salient during fieldwork: I, for example, distinctly remember the low and back production of DRESS by my yoga teacher on the island (*exhale* [ɛks'he:l]). DRESS lowering in younger females is a common tendency in American English vowel development, which offers an explanation for this development in Guam.

As already discussed in the presentation of the results, a potential change in apparent time for FLEECE and a potential dependency of this change on the social factor *sex* needs to be interpreted with care. The results only just approach significance, and the visualization of male/female and old/young differences show no clear pattern. Interpreting this potential change further would be highly speculative.

6.2.2.2.2 *Level of Education*

The social factor *level of education* revealed no significant results in terms of its effect on the short front vowels. This does not mean, however, that the level of education has no effect on Guam English. In fact, as I will explain in the discussion of the case studies, I assume that education is likely to have an effect on the local variety. However, the levels of education that were most well-represented in this dataset were rather high, with 45% of the dataset having a tertiary education and with only one speaker having no more than a primary education. Results of this study are therefore more informative on the mid to higher educated part of the population, which should be considered when interpreting the results, as additional years of schooling, where a standard-like speech is regarded as favorable (Babasa, 1982), may increase the speakers' likelihood to employ more standardized speech. A high representation of educated people is not entirely unlike the educational distribution found in Guam's population as a whole, for which less than 10% are educated on no more than a basic level⁵⁹.

⁵⁹ According to Guam's 2010 census, only 25.9% of the population has some form of tertiary education, 33.8% has completed secondary level education and 7.8% has an education level lower than 9th grade, i.e. lower than an upper secondary level (U.S. Census Bureau, 2012)

The short front vowel analysis only included one factor that gives information about the speakers' education, in order to keep the number of social factors included in the model at a minimum. The focus was put on the education level rather than the education type, as it is more common in linguistic research to comment on education level. This would allow for this study to be comparable to other linguistic works at a later stage.

6.3 *Research Question Three: In What Ways Is Guam English Converging Toward the Variety of its Colonial Power?*

Both the overview description of Guam English, as well as the short front vowel analysis have indicated that the speakers of Guam English are moving toward a more general American variety in many aspects of the language. *Section 6.2.1.1 - Substrate Language Influence and the Disappearance Thereof* demonstrated the loss of substrate language features in younger speakers. *Section 5.4 - Developmental Trajectories of Guam English* further discussed potential alignment with not only a general and standardized variety of American English but also the fact that Guam English shares a variety of features with American regional or ethnic sociolects. A few examples mentioned before were the light production of /l/, the frequent use of *like* as a discourse marker, or the monophthogal production of GOAT and FACE.

The short front vowel analysis provides further indication of a potential alignment with an American regional English, as the back production of KIT and DRESS in younger speakers is also a feature reported for California English. The fact that a nasal system is less evident in Guam English is a feature that the variety shares with ethnic groups of California, such as Chicanos, Korean Americans and Chinese Americans (Cheng, Faytak, and Cychosz, 2016).

In the case study, the analysis of Eric, a young acrolectal Chamorro showed that the speaker is using linguistic features that are comparable to an American English sociolect: He produces a variant of /s/ which resembles the /s/ reported for the American sociolect frequently associated with younger and gay speech, according to Mack and Munson (2012). He additionally makes frequent use of *like* as a discourse marker and uses up-talk, which is not exclusive to, but frequently associated with Valley Girl California English (Podesva, 2011).

These findings indicate that Guam English, especially that spoken by younger generations is in many ways aligning with the varieties found on the U.S. mainland.

6.4 *Research Question Four: What Factors Shape Linguistic Variation in Guam English?*

The fact that there is variation in Guam English has been touched upon at several occasions in this thesis. The main cause for variation has been identified as being the participants' age, as there is a clear difference between the oldest and youngest generation of Guam English speakers. However, other social factors, some of which were not included in the quantitative short front vowel analysis, also show potential cause for variation.

In the case study, I discussed four speakers of the same sex and age group that differ in terms of their ethnicity, level of education and type of schooling. I found noticeable differences between all four speakers, but there were most noticeable distinctions between the most basilectal speaker, who has the lowest level of education in the entire corpus, and the other, more highly educated speakers. The three more acrolectal speakers show more similarities amongst each other, but ethnicity may be the cause for additional variation. The Caucasian speaker, despite having grown up in a rural, Southern area of Guam and having gone to public school, which are all factors that potentially favor a more non-standard variety, employs highly standardized speech. There is less distinction between the acrolectal Filipino (Chamorro) and Chamorro speaker, despite the fact that the two have been raised in different cultures. It appears that younger generations of the Filipino and Chamorro ethnic group who are born and raised on Guam show signs of assimilation in their speech, which would corroborate the theory of feature transmission and diffusion discussed on the theoretical framework of this dissertation. Further research should include more speakers from the various ethnic groups residing on Guam to further explore this possibility.

6.4.1 *(Not) Making Sense of Variation*

Although there are general developmental tendencies that appear to be dependent on the speakers' age and potentially also their level of education, sex and ethnicity, I find much variation in and between many age and social groups that I cannot conclusively make sense of, but only make a few tentative assumptions here. I have established that non-standard features found in the oldest segment of Guam English speakers are likely an intrusion from the speakers' L1. This, however, is unlikely the case in the youngest segment of the community, as many don't fluently speak the indigenous language anymore. The fact that the occasionally used non-standard features still show resemblance to the substrate language therefore needs to be explained further. It may, for instance,

be the result of ethnic marking in speech. According to Giles (1979), substrate language intrusions in second and third generation Americans of immigrant parents need to be analyzed in light of linguistic identity construction:

The features peculiar to Polish, German and Norwegian accents of American English can be directly attributed to intrusions from the substratum or mother tongues. However, caution should be exercised in regarding such intrusions *simply* as instances of interlingual *interferences*, particularly in the cases of second and third generations of immigrants, as they may often be adopted by them deliberately as ethnic speech markers to establish a distinctive linguistic identity. . . . (260) [Giles' italics] (Giles, 1979; as cited in Lowenberg, 1986, p. 9)

Based on Giles' assumption, the remaining influence of the substrate language in some but not all younger Guam English speakers may therefore be explained by a variable association with the local indigenous culture. The deliberate marking of ethnic speech may be stronger in some and less pronounced in other speakers, which would explain the highly variable continuum of standard and non-standard speakers in Guam. This includes the Filipino ethnic group as well, among which many young speakers integrated in the local culture.

Some research (e.g. Kachru, 1992) suggests a generational pattern regarding the adoption of substrate language features into English, but this may not be entirely adaptable to Guam: In speakers of a newly emerged variety of English, substrate language influence is often found to be negligible in the first generation who adopts the language and only becomes prominent in younger generations. Early documentation of New Zealand Maori English speakers, for example, shows that the first speakers to adopt English sounded very similar to the influential British English norm and only later, as English developed outside of colonial contact, did substrate language influence increase, although at that point, the presence of substrate languages was much lower than in the initial years of contact (Britain, personal conversations, 2019). Similarly, Kachru (1992, p. 40) argues that in the initial phases of the development of a new English, a local variety is not recognized even by those who speak it, but instead, only the variety spoken by native English speakers is considered desirable. He terms this the “brown sahib attitude”: “A ‘brown sahib’ is more English than the Englishman; he identifies with the ‘white sahib’ in manners, speech, and

attitude.” Only as the new variety of English continues to develop do local features get accepted into the speakers’ repertoires.

Assuming that similar developmental patterns apply to Guam, it would be likely to find three generations that are distinguishable in their speech: the oldest generation that speaks Chamorro as a first language and shows great substrate language influence, the early post-WWII generation that represents those early native speakers who carefully adopt the language of their colonizers, the U.S. and, finally, the youngest generation that again adopts substrate language influences in the development of an ethnic variety of English. However, based on my linguistic analysis of Guam English, I only find a clear difference in speech between the oldest segment of the community and the younger generations. Among the rather large group of younger speakers, ranging from the early post-war generations to teenagers, I find a range of variety that I cannot conclusively explain based on the social and linguistic factors I focused on, namely, age, sex, level of education and phonological environment. As the following conversation with a 61 year old female Chamorro informant illustrates, the range of variation may be dependent on several factors that cannot be definitively pinned down. This speaker grew up in a family of nine siblings, all of whom show different speech patterns, not necessarily dependent on social contact with Americans, mobility, age, gender or home language use:

Gu19f61: So, there are nine of us. There *were* nine of us, two of my siblings have passed away. But we all had different accents⁶⁰, yeah, and we all grew up here, we all grew up the same- house, and-
Fieldworker: Have you left the island very much?

Gu19f61: No, I mean, I've been off-island, but I've never lived off, you know. The longest I've ever been away was like couple- couple of weeks [...] My sister- we, we speak the same. We've had this accent since we were growing up. We both, we- we learn, err, you know, two languages growing up.

Fieldworker: Chamorro and English?

Gu19f61: Yeah Chamorro [...] was my first language. I'm sure because my mother [didn't] speak English very well, but there's half of us- have a Chamorro accent and half of us don't, so.

Fieldworker: That's interesting and you, you can't explain why?

Gu19f61: Well, yeah, I- I mean, so [...] because we hung out with, err, you know, people, couple of blocks away, were, err, were Americans. They're from the States, but that's not- I didn't hang out

⁶⁰ As the siblings of this informant were not part of my study, I cannot confirm the speech patterns of her family members.

with them, err [was it oh]. Well, in school we were not allowed- back then, we were not allowed to speak the language. We were only to speak English [...] My oldest brother has a really, umm, he talks really fast. I mean, we don't even under- even when he speaks Chamorro, we don't understand- we have a hard time understanding. And then my second, my sister, she's here visiting from Vegas. She lives over there, but she's got a really heavy accent, Chamorro accent. Yeah, and she's been away a while. She- she's the one who lived off, has, have lived off island. She's been to, you know, her husband was in the military, and so she's lived away for- for many years. But she's got a very strong Chamorro accent, but that's because she and her husband speak the language. And, and then my third, err, my, err, brother has a heavy accent, you can tell. And then my sister, who's right now seventy-one, she's ten years older than I am. She doesn't have an accent. And then, the one below her, has an- had an accent. Okay, and then my brother, who's sixty-seven now, he doesn't have an accent. My sister doesn't have an accent, my brother- And, and I- so it's like, yeah, well, the older ones, I always think, because they were, err, what is it- They're, they're older, they lived during the war and they had to stay home, of course, you know, so- I can understand that.

The informant discusses the speech of herself and her siblings pointing out potential social factors that may have influenced the fact that some of her family members portray more standard-like speech and others show more substrate language influence. In this example, all of the siblings had knowledge of the indigenous language, but were encouraged not to speak it in school (though they were never punished for speaking it). Some had relocated to the U.S. mainland, some had close social contact with American neighbors in their childhood while others didn't, but none of these factors suggest a pattern in their diverse speech. The informant considers age to be the most likely influencer, as those siblings who lived through the war show more Chamorro influence. But even for this factor she finds a counter example as one of her oldest siblings employs more standard language. Another potential influencer would be the home language or social networks, but again, those factors do not explain the variation in all of her siblings. The interviewed speaker herself showed standard American speech patterns with the exception of her pronunciation of the word “war”, which followed the local pronunciation as [wɑ̃].

To conclude this section of the discussion on variation in Guam English, I can say that there are general tendencies dependent on the speakers age, but from the post-war generation until the present, there is a wide range of variation possible whose social stratification remains unresolved, but may be influenced by the various closer or more distant association with the local

community or the American mainland. Underwood (2019) suggests that though Americanization of Guam's population is undeniable, the process is not entirely simple:

We have a role to play in the American presence in this part of the world and are playing it well. Being fully American is something else. The reality is we're not really considered Americans. [...] We are not real Americans. Some may want to be, but we're not there yet. It is time that we realize this.

Underwood states that Guam's population is not considered "fully American," and perhaps variable association with both local and mainland American customs and values is the cause for much of the diversity found in this community.

6.4.2 *Other Explanations For the Linguistic Changes Found in Guam English*

- a) In *Chapter One – Theoretical Framework*, I discussed a number of World Englishes that are said to show influences from American English, but researchers oftentimes conclude that the varieties spoken in their respective regions are still noticeably distinct from a General American variety and that perhaps instead, American features have been localized and adopted to their variety with an additional local color. Australian English, Philippine English, Bermuda English and even several L2 Englishes in and outside of Europe, for example, show lexical, phonological, morpho-syntactic and intonational features which are likely to stem from American English influence. This is said to be most likely due to historical contact to the U.S., but also the presence of American English in the media, pop-culture and advertising (Peters, 1998; Sussex, 1989; Taylor, 1989). Assuming that Guam English would fit into this group of world Englishes, it could be interpreted as a variety that was heavily influenced by the U.S. at some point, but that it is developing more and more into a localized variety that perhaps eventually will not be closely associated with the variety of the colonizer anymore. However, at this point, Guam's history, political status and culture is still very closely intertwined with the U.S. and the many similarities with the mainland variety are not at a stage where they can be explained. Perhaps future developments of Guam English will develop in this direction if there is an increasing detachment from

the U.S. in political and cultural sense, but this is likely not the case in the nearest future.

- b) The short front vowel characteristics found in Guam English could be the result of a more *conservative* language development. This means that Guam English may simply lack or lag behind in some of the well-documented vowel shifts of U.S. regional Englishes. The consistently low and back position of TRAP would be an example of a more conservative vowel production. While a majority of U.S. regional Englishes have developed a fronted pre-nasal and even pre-velar /æ/ (Labov, Ash and Boberg, 2006), Guam English seems to not have been affected by those shifts as TRAP has remained low and back.
- c) Some vowel changes found in Guam English could be explained as a move away from the stigmatized L2 variety toward a more L1 variety of English, regardless of a regional specificity. The retraction of KIT in Guam may be an example of this: the retraction of KIT would allow for a new distinction of two previously more merged vowels (KIT and FLEECE). The merger in older speakers is a feature that the community is aware of and that has even been humorously pointed out in a comic book where the pronunciation of the word “ship” is said to sound like “sheep” (Tydingco, 1992). Perhaps because of the saliency of non-standard features, younger speakers were more likely *not* to adopt them from the older generations and instead to develop toward a more standard-like variety. This process could be an example of feature transmission and diffusion based on Mufwene’s (2001) model of the feature pool (c.f. *section 2.1.2.6 - Language Transmission and Diffusion - The Feature Pool*). Both the more standardized production of KIT and FLEECE, as well as the more L2-influenced production are “floating around” in Guam English, but due to the stigma of the latter, younger generations adopt the former. This theory would hold not only for the example of KIT and FLEECE production, but also for the production of /z/ as [dʒ], for example in the word *zip lock* ([dʒiplʌk]). This, again, is a feature that was stigmatized on the island and frequently pointed out to me as something the “elders” still do.
- d) Some features found in Guam English may be explained as simply being *Angloversals* or “New Englishisms” (Simo Bobda, 2000), which means that they are common to the English language and new Englishes, regardless of regional language influence, as

suggested by large-scale comparison work on New Englishes Sand (2004). They may be part of a world-wide evolution of English, as suggested by Deterding (2014). This hypothesis would explain a number of Guam English features that I have not touched upon yet in this section. The lack of third person -s marking, for example, seems to be a feature that is common for a range of new Englishes. eWAVE lists 25 English varieties using this feature in a pervasive or obligatory way (e.g. Aboriginal English, Hawai'i Creole, Malaysian English) and 14 varieties that use it in neither a pervasive nor an extremely rare way (e.g. Acrolectal Fiji English, Bahamian English) (Kortmann and Lukenheimer, 2013). Schneider (2004) further suggests that the same non-standard use of tense is often shared by many Englishes. The use of simple present where Standard English suggests past tense would be one such example. Present simple is used for continuative or experiential perfect in Guam English, but also regions such as Fiji (Hundt, Biewer and Zipp, 2013), Bislama (Meyerhoff, 2013) or the Falkland Islands (Britain and Sudbury, 2013), among many other regions. In his discussion of American English influence on Australian English (AusE), (Taylor, 1989, p. 227) concludes that “since World War II there have, of course, been many thousands of transfers into AusE from outside, the vast majority from AmE, but as they have also become part of General English (GenE) there is, on the whole, no need to deal with them here.” For many features, he therefore dismisses the close analysis of AmE influence on other World Englishes and instead considers them as part of a General English. I would argue, however, that Guam English is not developing in the direction of a World English, as the “New Englishisms” discussed above are actually disappearing in younger speakers as they become more Americanized.

- e) Based on the finding that the development of the Guam English vowel system shows many similarities to ethnic California English, the comparison to a *supra-regional ethnic American English variety* becomes plausible. The English spoken by Hispanic communities, for example, is described not only for the Southwest, but also, many other U.S. regions, such as the North (Konopka and Pierrehumbert, 2008) or Northeast (Wolfram, Carter and Moriello, 2004; Poplack, 1978; Newman, 2007). Consequently, if Guam English shows similarities to Chicano California English, it may simultaneously show similarities to other regions where this ethnic variety is found and

therefore the focus would shift from being a regional target language to a supraregional ethnic one. A community of speakers of Mexican heritage in Chicago, for example, lack TRAP raising despite the fact that their non-ethnic counterparts produce a raised TRAP as part of the Northern Cities Vowel Shift (Konopka and Pierrehumbert, 2008). In New York City, a community of L1 English speakers of various Latin American heritage countries (but with Puerto Ricans making up a majority) show similar language patterns to the Chicano English speakers of the American West in regard to the production of [ɪ], which is lighter in its onset compared to European Americans and African Americans of the same regions (Slomanson and Newman, 2004). Finally, preliminary research on language perception of Korean and Chinese Americans suggests that there are a few language features that are generally associated with Asian American English (e.g. a low production of DRESS, or longer voice onset times for voiceless stops) (Newman & Wu, 2011). All of these findings point towards a potential for regional similarities in ethnic varieties of English. More research on regional variation in Latino English(es) and Asian English(es) could open up a similar debate as the ongoing one on African American Vernacular English, where both supra-regional similarities, as well as regional distinctions are found (c.f., for example, Hinton and Pollock, 2000).

6.4.3 *A Tentative Conclusion*

In this chapter, I have provided an extensive list of possible explanations for the linguistic development of and variation in Guam English. For each possible explanation, e.g. substrate language influence, American regional influence, universal post-colonial English developmental patterns, I have found that it may explain some findings in the description of Guam English, but not all. Instead of forcing the variety into a framework it only fits to a certain extent, a better strategy is to stress that the development of and diversity found in Guam English is the result of a combination of factors. It was likely the remaining substrate language influence, the connection to a standard American English through education and the media, and the social and linguistic ties to an American regional or ethnic English that are responsible for most of the developments. For the older generations, the substrate language influence is more noticeable, whereas the youngest speakers portray assimilation to Chicano California English. This research contributes to the

knowledge of developmental patterns of post-colonial Englishes developing out of contact with the U.S. It portrays how the linguistic influence resulting from close contact with the colonizer is saliently noticeable in the newly emerged variety, but the variety remains regionally specific to Guam and internally variable.

6.5 Research Question Five: How Can Guam English Be Categorized Within a Constellation of Previously Described World Englishes?

The discussion of the historic emergence and linguistic development of Guam English in the previous sections lays the necessary groundwork to compare Guam English to the trajectories of other post-colonial Englishes. Only based on both the socio-historic background as well as the linguistic background of the island community can I make tentative conclusions about placing Guam English in the World Englishes paradigm. The aim of the following section is to place Guam in the various static and dynamic models proposed by Kachru (1992), Trudgill (1986) and Schneider (2007). This will give further insight into the applicability of those models onto a variety of English that has developed in an American settlement colony. The remaining close connection to the U.S. in a political, cultural and linguistic sense indicates that Guam English cannot be discussed entirely separately from its colonizer, and its position in the various models remains intertwined with that of the U.S. and American English.

6.5.1 Guam English in Kachru's Static Model

Positioning Guam in Kachru's (1985) model is a difficult task for several reasons. For one, the history of Guam and its current status as an American territory shows both characteristics of an outer circle English as well as an inner circle English, depending on how you define the terms. Additionally, Kachru's model was designed for regions and types of English that Guam may simply not fit into, which makes it difficult to assign Guam to any of the suggested circles.

Guam English has many characteristics that fit the definition of an outer circle English variety: English is institutionalized and extremely wide-spread, but the language only arrived there because of colonial impact from an inner circle English, namely American English. Up until a few decades ago, the indigenous language was still widely used, and English was more of a language for official matters and not frequently spoken in the homes of the locals. The more recent

developments toward an American lifestyle and language of the islanders are a result of the political influence the inner circle country has had, and still does have, on Guam.

However, while Guam may have fit the definition of an outer circle English previously, it certainly has moved “inwards” in recent years and no longer fits Kachru’s definition of an outer circle English. The two defining factors of an outer circle English variety according to Kachru (1985, pp. 12-13) are: “(a) English is only one of two or more codes in the linguistic repertoire of such bilinguals or multilinguals, and (b) English has acquired an important status in the language policies- of most of such multilingual nations.” English is now so established on the island that a majority of the inhabitants is not bilingual anymore. Instead, the indigenous language is endangered and younger generations generally speak English as an L1. Even though there are many languages spoken on the island, and Chamorro is still considered an official one, English has clearly become the dominant variety in all areas of social life. Kachru (1985, p. 12) considers regions where English is the primary language as inner circle English regions.

Kachru further explains that there is no one correct form of English, but instead, one characteristic of the various inner circle Englishes is that they each represent a model for the other two circle Englishes. Guam English might have become so established in the Pacific region that it is now a model or epicenter for other Pacific Englishes, such as the Englishes spoken in the Federated States of Micronesia, the nearby Mariana Islands or the many Filipino groups coming to the Pacific island for work opportunities. The latter group was shown to assimilate to the local dialect, as younger Filipino speakers, such as Seth, described in the case study (c.f. *Chapter 4 - Results, Part 3*), show only few signs of a distinguishable speech from Chamorro Guam English speakers of the same age group and seem to have refrained from adopting the Philippine English features found in the older generations (e.g. trilled /r/, see *section 3.8.4 - Philippine English*). Based on the lower socio-economic status of the Pacific islanders, e.g. the Chuukese and Kosraeans, residing in Guam (as established in *section 3.8.5 - Other Languages in Guam*), it can be assumed that those groups would show similar tendencies. They may view Guam as a model, not only in terms of their life-style and economy, but also -perhaps less consciously- linguistically. This would place Guam English into the inner circle. Further research ought to look into the language development of other Pacific Island groups in Guam to potentially corroborate what is now just a hypothesis.

Finally, I hypothesize that Guam could be considered an inner circle variety, or a variety that is on the way to become one, simply based on Guam's political status as an American territory. Guam's inhabitants are U.S. citizens, which would make their variety of English an American one by default and therefore it would be considered an inner circle variety.

There are aspects that complicate the positioning of Guam English as an inner circle variety. Although I would categorize Guam English as an American variety, it best fits the definition of an *ethnic* American English variety. Kachru does not discuss ethnic or social variation in a large, norm-providing community such as that of American English speakers and certainly, advocates of language standards and norms would object to the idea of a newly emerged ethnic variety being considered an inner circle English. They would perhaps rather agree that it simply does not fit Kachru's model. Kachru agrees that the status of English in some regions -he names Jamaica and South Africa as examples- is simply too complex to be placed in his model. I would therefore conclude that Guam English could either be placed on the line between an inner and an outer circle English, or its position in the concentric circles model is simply too ambiguous.

I will refrain from going into further detail about criticism of Kachru's static model, as this has already been touched upon in *Chapter 1 - Theoretical Framework*. In the next sections, I will discuss the position of Guam English in dynamic models, and will argue that they provide a better base for this newly emerged English.

6.5.2 *Guam English in Kachru's Dynamic Model*

In his dynamic model, Kachru (1992) focuses much more on various stages that a new English may go through, including the various language attitudes that influence its development. Particularly in terms of attitudes toward Guam English, the variety seems to follow Kachru's dynamic model quite closely. Guam is likely to have gone through a stage one, *non-recognition*, shortly after the Americans' return to the island after WWII. At this point in Guam's history, Americans and everything they represented were celebrated as heroic. Islanders aspired to be Americans, not just in terms of their life-style, but also in the way they spoke English. The local variety was not accepted as an individual variety, but instead was viewed as "broken English".

Guam is now in phase two, where the local English has diffused into several varieties along a continuum. Speakers use both standard speech with only few recognizable Guam English features, as well as basilectal forms, such as the Chaud accent (c.f. *section 3.8.3 - English in Guam*

and *Chapter 4 – Results, Part 3*). Many claim that they can switch between more or less formal styles. The more basilectal forms are, to some extent, still stigmatized, but not necessarily as an undesirable variety and more so as a recognizably provincial variety. It is not only used by a lower-class segment of the population but also by higher-class Chamorros, particularly in contexts where they wish to highlight their local identity. Guam’s former Senator, Tom Ada, for example, has stated that he freely switched into the local variety in such circumstances (Quan, 2010). Guam entered phase two with the first generation of monolingual English speakers who were in contact with both their parents’ L2 English, as well as the more standardized American variety they came in contact with through school teachers and the media.

The third stage of Kachru’s model, i.e. the starting point of the recognition and acceptance of the localized variety as the new norm, has not been reached in Guam, and I argue that a development into stage three is not in the near future. This is mainly based on the fact that the generally accepted norm as an official language is not Guam English, but Standard American English instead. Standard American language skills is what the school curriculum bases its teaching goals on (c.f. English Language Arts Standards, 2019; Guam Education Board, 2019) and at this point, the variety of the younger speakers is developing closer to an American norm. Those that are employing local features do so in such a variable way, on a wide spectrum between basilectal and acrolectal speech that there may not be consent of what exactly constitutes “official” Guam English. It is therefore unlikely that the non-standard variety will be what is taught as an official language in schools soon.

6.5.3 *Guam English in Trudgill’s Dynamic Model*

The placement of Guam English in the stages of Trudgill’s (1986) model is complex, as the history of Guam is very different from the kind of colonial contact that Trudgill had in mind when proposing his model, which was explicitly based on L1 varieties of English. There is no *one* mixed group of settlers that started interacting and levelling their dialects as they settled for generations to come. Rather, American settlers arrived in waves, consisting of different groups that came to and left the island for various motivational reasons. In the beginning, it was mostly teachers and military personnel that stayed on the island for a limited time only. They interacted with the local community as teachers trained locals in teaching, and the military administered the occupation of locals in government and military jobs. The constant fluctuation of people who intended to stay

for only shorter periods of time, however, may have limited the process of rudimentary dialect levelling within the newcomer group. If there was such a linguistic development, it came to an abrupt halt when the Japanese took over control of Guam and the American settlers left the island. After the war, when the Americans returned, it was a different group of people that settled on the island. Initially, it was not only military personnel, but also American construction workers who came to build up the war-destroyed land, as well as teachers and lawyers. Most were on short-term contracts and did not intend to stay permanently (Rogers, 1995), except for a smaller group of teachers and lawyers who did. Perhaps it is this group of more permanent settlers that arrived in the second American period that could have initiated *stage one* in Trudgill's model. At this point, dialect levelling between the various settler groups could have occurred and likely, the younger generations of indigenous people, who grew up aspiring to be like Americans, started to assimilate toward social and linguistic customs of the newcomers (Barusch and Spaulding, 1989).

Those younger generations would therefore mark the beginning of *stage two* in Trudgill's model, as they started to adopt the most common language features of a very heterogenic first generation, possibly preferring those not used by their L2 speaking parents, but rather by their white peers.

I argue that Guam English now has completed *stage three* of Trudgill's model. The variety of the younger generations is fine-tuned in a way that mainly represents the language of the (former) colonizer. The younger social groups are looking toward the mainland U.S. as a language model with which they come in contact through the media, their white peers, but also -perhaps in a slightly more heterogenic way- with the generations before them. At the same time, the development toward American English happens alongside the expression of cultural and linguistic pride for the Chamorro culture through the local vernacular, which includes features that are less standard.

6.5.4 *Guam English in Schneider's Model*

Because of Guam's complex history, which involves several colonial powers and also several periods of the *same* colonial power (the U.S.), positioning it in Schneider's (2007) Dynamic Model requires some adaptations. Guam English most likely did not follow a smooth development along the model's trajectory, but instead went through several stages and reversals of the same phase, before it finally settled in phase III of the model. A summary of the main defining characteristics

of each phase can be found in table 17, where I also note in bold how the case of Guam deviates from Schneider's proposed characteristics.

6.5.4.1 Phase I - Foundation Phase

Guam went through some form of a Foundation phase as proposed by Schneider, though it was likely relatively short lived in the initial years of the U.S. settlement. The newcomers arrived with a set political plan and with concrete language policies in mind (Rogers, 1995). This moved the development of Guam English quickly into phase II, where the establishment of English as the language of administration is a defining feature. In terms of the historic and political context of this initial phase I, Guam was a colony and military outpost for the U.S. and the indigenous had little say in the occupation of their land. The settlers, who were mostly military personnel on rotation, assumed their stay to be temporary, which presumably had an effect on their identity construction to remain very much oriented toward their origin, the U.S. The locals, i.e. the Chamorros and Filipinos, remained as a separate group at this point. Schneider's distinction between an indigenous and an adstrate strand may be less relevant at this stage, as Filipinos had become an "invisible" part of the local community, blending in with the Chamorros (Pobutsky and Neri, 2014). The locals did not intermingle much with the newcomers in this first stage, which entailed a separate identity construction. They did, however, learn English, the new official language, very early on, as they were obligated to learn the language in the newly introduced school system and therefore quickly became bilingual. This limited the development of incipient pidginization as the indigenous were soon expected to communicate in English. Nonetheless, a considerable number of borrowings from Chamorro into the settlers repertoire, particularly for food and place names, likely occurred, considering that many street names in Guam still carry Chamorro names. As mentioned in the discussion of Trudgill's and Kachru's models, initial dialect levelling and simplification among the settlers may have been less extensive than in colonial contexts where the settlers remained for longer periods of time (e.g. New Zealand) and therefore were in much more intensive linguistic contact. It is possible, however, that language of the newcomers was already somewhat homogenized as a result of years of professional upbringing in military institutions where speakers from various dialect regions interact on a daily basis. I could not, however, find research corroborating or contesting the assumption that dialect levelling occurs among military personnel.

Guam likely went through two stages of the Foundation phase; a brief one during the initial contact with the U.S., and another soon after WWII, when the Japanese were forced to surrender Guam and the U.S. was back in a position of power. During the second stage of the Foundation phase, it was not only the military personnel that arrived back on the island. Instead, it was American construction workers, lawyers and teachers who were among the first to resettle the island in an attempt to build it back up after the war. Some form of koinéization, a defining linguistic characteristic of the Foundation phase, likely occurred in the first, but mostly in the second stage as those various groups started to interact more. During the second stage, the identity constructions and the linguistic development were significantly different compared to the first. As the return of the Americans in the second stage was interpreted as a liberation from a brutal war occupation, the indigenous were much more prone to assimilate toward the American lifestyle. They were also far beyond the initial stages of bilingualism, as they already had a history of American education and were proficient enough in the language to use it on a daily basis and even raise their children in it (c.f. phase III). Language attitudes toward American English, at this point, were mainly positive, whereas the indigenous language was regarded as unnecessary for the much desired economic success (Babasa, 1982). The developmental patterns of the Foundation phase as it occurred in Guam already suggests a slight deviation from Schneider's model, as American colonization did not follow an uninterrupted chronological path.

6.5.4.2 Phase II - Exonormative Stabilization

The entry into this phase occurred with the formal establishment of English as Guam's official language shortly after American settlement and again after the return of the U.S. post WWII. Since school was mandatory for all children, everyone on the island had access to English language education, which meant that the language was not limited to a small elite but spread rapidly. Still, higher proficiency in the language allowed for better job opportunities, which did add an elitist aspect to it (Rogers, 1995).

In regard to other characteristics of this phase, Guam lagged behind. The formation of a hybrid community among the younger generations was rather limited, as American children were educated in schools separate from the locals and therefore did not get much into contact with that group, i.e. the Filipinos, Chamorros and others. This was mainly because children from military

families, who were only stationed on the island for a limited time, were expected to return to the U.S. mainland eventually, they had to perform well in school in comparison to their local peers to keep up with mainland standards. Chamorros were expected to remain on the island and were not regarded as equally in need of higher education (Rogers, 1995). Identity constructions of the settlers and the indigenous were therefore still very much distinct, and it is unlikely that the American settlers identified as local Guamanians in the initial years of American colonization.

6.5.4.3 *Phase III - Nativization Phase*

Guam's entry into phase III of Schneider's model coincides with the birth of the first monolingual Guam English speakers. In terms of Guam's political history, the island does not follow the pattern suggested by Schneider's model, as the ties to the mother country did not weaken and instead grew closer, with Guam becoming an unincorporated and organized territory of the U.S. Linguistically, however, the community clearly entered the nativization phase: English quickly became the preferred, dominant and nativized language. This, in fact, appears to have happened soon after WWII, when the Americans returned and L2 speakers of English decided to raise their children in English to give them a better economic future. Schneider (2007, p. 42) lists relevant factors for stage III, such as "the appreciation of English, its persistent presence with important functions, and the desire to maintain contacts with the former colonial power and to participate in international communication". All of those factors played an important role in the locals' attitude toward English, as discussed at several points throughout this thesis (c.f. *section 3.8.1 - Language Shift*, *section 3.8.3 - English in Guam*).

In terms of *linguistic developments*, Guam English shows characteristics of the Nativization phase, particularly in the range of innovations that are commonly used by the locals. To name only a few, the locally marked phonology (devoicing of word-final voiced stops, th-stopping) and the use of Chamorro lexis (*pari*, *chelu*) are all signs of linguistic innovation with "cultural embedding" (Richards, 1979). Innovative stress patterns, which Tay (1982) considers a common feature of New Englishes, are also found in all generations of Guam English speakers. However, as I will argue here, though there are innovative forms in Guam English, it does not appear to be developing toward an independent, official variety of English. Instead, the results of the linguistic analysis suggest an assimilation toward an American (ethnic or regional) norm among the younger generations. Features that could be interpreted as linguistic innovation, for

example the use of historical present and the omission of prepositions (“I didn’t go college”) are used more rarely and could simply be viewed as remnants from L2 influence.

Guam has stagnated in phase III of Schneider’s model. The region remains a territory of the U.S., which does not grant it full political independence⁶¹. The formation of a hybrid community between the mainland settlers and the indigenous did not fully occur. In fact, I was under the impression that the “new us,” as described by Schneider (p. 41), mainly occurred between the local Filipino and Chamorro community who mainly went to school together. The white community has remained separate to some extent, and is often not viewed as a permanent part of the island community. In conversations with the locals during fieldwork, I was frequently told that locals had only few Caucasian friends, as those made up a minority in the public schools. This separation of Caucasians is perhaps due to the fact that a) the history of the most long-standing Caucasian families in Guam only traces back to post-WWII times, as most mainland Americans had left the island during war time, and b) because many mainland Americans are still expected to stay on the island for only a limited time period, as they are often only there on rotation for a medical or military occupational program. I was personally made aware of this during fieldwork, as I was frequently asked whether I was employed by the military (“are you military?”) or I was assumed to be medical personnel. Furthermore, young Caucasians frequently leave the island to attend college on the mainland.

6.5.4.4 Phase IV and V – Endonormative Stabilization and Differentiation

Guam has not moved past the nativization phase due to its remaining close political and linguistic ties to the U.S. There is no comparable “event X” where the colonized nation finds itself politically separate from the former mother country. If anything, the return of the U.S. after WWII may symbolize a counter event X, as locals started to associate more with their colonizer. Furthermore, the assimilation to an American language norm suggests a stagnation in the nativization phase. In this respect, Guam is clearly distinguishable from those nations that have linguistically moved into phase IV or V. Australia, for example, has determined language matters officially and internally, which includes the use of the post-colonial variety in formal contexts and the documentation

⁶¹ There are reoccurring debates about the political status of the island and decolonization is certainly a present political topic, but the decision for a public vote on the matter is still pending (United Nations, 2017).

thereof in dictionaries. The status of those nations that have developed beyond phase III implies “the futility of the need to compare one’s English with another” (Gonzales, 2017, p. 93), which does not apply to Guam English due to its close resemblance to American English, particularly in the younger speakers.

The fact that Guam English has not reached phase IV does not mean that there is a complete lack of acceptance for local language features. The local English variety is recognized amongst the inhabitants and enjoys considerably high prestige as it is associated with being local and indigenous, as well as with being rural and older. Those are increasingly seen as positive attributes owing to the great political and educational efforts put into the preservation and revitalization of the indigenous culture. The local English variety is, however, by no means accepted as a standard and is not viewed as the variety of success when it comes to business interactions or communication outside the island community.

When it comes to linguistic differentiation, a characteristic that Schneider places in the final phase of a post-colonial language development, Guam English does show a considerable amount of diversity. There is a continuum of basilectal and acrolectal forms that are regularly used. Many speakers are also able to style-switch from one form to the other depending on the interlocutor. Additionally, speakers of different ethnic groups, such as Chamorros and Filipinos, show some linguistic variation in comparison to the Caucasians local to the island. This, however, I do not interpret as a sign of Guam English moving into the Differentiation phase. Rather, I would suggest that variability is an inherent characteristic of language and happens in any context at any developmental stage.

<i>Phase</i>	<i>History & politics</i>	<i>Identity construction</i>	<i>Sociolinguistics of contact/ use/ attitudes</i>	<i>Linguistic development/ structural effects</i>
<i>1: Foundation First Stage</i>	STL: 1898, colony and military outpost IDG: Occupation, loss of land	STL: part of original nation, military IDG: indigenous	STL: cross dialectal contact (Military English), limited exposure to local languages IDG: minority bilingualism (acquisition of English)	STL: koinézation, toponymic borrowing
<i>Second Stage</i>	STL: return of the American administration in 1944. Settlement initially by teachers, lawyers, construction workers and military IDG: occupation vs. “liberation”, U.S. citizens as of 1950	STL: part of original nation, with exceptions IDG: indigenous	STL: cross dialectal contact (Military English), limited exposure to local languages IDL: Proficient in English and Chamorro, positive attitudes toward English	STL: koinézation, toponymic borrowing
<i>2: Exonormative Stabilization</i>	“stable colonial status English established as language of administration, law, (higher) education” (Schneider, 2007, p. 56)	STL: part of original nation, military IDG: local plus English	STL: acceptance of original norm IDG: wide-spread bilingualism	lexical borrowing
<i>3: Nativization</i>	Continuously strong political ties to the U.S. Remaining cultural association	STL: permanent resident of American origin “IDG: permanent resident of indigenous origin” (Schneider, 2007, p. 56)	“widespread and regular contacts, accommodation” (Schneider, 2007, p. 56) STL: “sociolinguistic cleavage between innovative speakers (adopting IDG forms) and conservative speakers (upholding external norms [...])” (Schneider, 2007, p. 56)	moderate “lexical borrowing IDG: phonological innovations (“accent,” possibly due to transfer); structural nativization, spreading from IDG to STL: innovations at lexis – grammar interface (verb complementation, prepositional usage, constructions with certain words/word classes), lexical productivity (compounds, derivation phrases, semantic shifts); code-mixing (as identity carrier)” (Schneider, 2007, p. 56)

4: <i>Endonormative Stabilization</i>	no political independence, no comparable “event X”	American culture alongside indigenous cultural preservation	“acceptance of local norm (as identity carrier), positive attitude to it” (Schneider, 2007, p. 56) association of local dialect with rural or older speakers (Quan, 2010)	development of new variety to American (regional) norm
5: <i>Differentiation</i>	only limited sociopolitical differentiation	group-specific variation as inherent characteristic of any language	network construction as inherent characteristic of any language community	Overall loss of local language features

Table 17 - Adapted from “The evolutionary cycle of New Englishes: parameters of the developmental phases” (Schneider, 2007, p. 56). How to read this table: the characteristics highlighted in **bold** are ones that deviate from Schneider’s model. All other characteristics are similar to Schneider’s model, but occasionally adapted with historic events specific to Guam.

Some issues remain in terms of placing Guam in any of the above suggested models. For one, the island’s history did not follow an uninterrupted trajectory in regard to its contact with the U.S., and therefore did not smoothly develop from one stage to the next. Additionally, the fact that the settler group remained only temporarily further complicates the model. High mobility on and off the island is still a strong characteristic of Guam and may have an effect on the local cultural and linguistic development. Finally, the development of English from an L2 to an L1 language on the island has reached near completion, but the lack of independence from the former colonizer favors an interpretation of Guam English not as an independent English variety but as one embedded in the linguistic developments of the American English. Nonetheless, a close analysis of an American-based (post-)colonial variety gives further insight into the application of the most common language developmental models.

6.6 *Looking back and moving forward*

In describing a variety of English that has newly emerged due to close colonial contact with the U.S., I have exemplified linguistic variation and change in apparent time in a geographic region that remains under-researched. I have shown the salient differences between the oldest segment of the population, the Manåmko’, who are L2 speakers of English, and the post-WWII generations, who are showing signs of assimilation to a regional and/or ethnic American norm. I have singled

out *age* as a significant social factor to affect the variety, both in an overview description of Guam English as well as in a quantitative analysis of the short front vowels. I have discussed further possible social factors that may play a role in the social stratification of the variety, which is persistent throughout all generations. This was particularly shown in the case study of four young local males who show both linguistic similarities despite social differences and linguistic differences despite social similarities. The description of Guam English -a first of its kind- has contributed to the field of variationist sociolinguistics in several ways. For one, I have put a new variety of English on the map, allowing for future linguistic comparison. This is particularly important as the Micronesia region as a whole has remained under-researched in terms of its linguistic development. Furthermore, I have discussed the position of the variety in connection with the developmental pattern of other World Englishes, which has allowed me to place Guam English in the various developmental models suggested by scholars.

Further research should continue to document and analyze the developmental pattern of Guam English with the inclusion of more data from various social and ethnic groups. To further discuss Guam's development alongside that of the U.S., research on Guamanian diaspora communities in the U.S. would allow for more insight into the social ties between the two regions, and consequently would allow for a more detailed description of linguistic contact and influence. Furthermore, research on the social and linguistic contact between Guam and other Micronesian islands could provide further information on Guam's potential position as a linguistic epicenter, due to the high advancement of its English in the World Englishes paradigm and due to its persistently close connection to the U.S. as a colonial power.

7 References

- Aguon, J. (2018). *Nginge': Showing Respect*. Retrieved from Guampedia: <https://www.guampedia.com/nginge/>
- Alonsagay, I., & Nolasco, J. (2010). Adversativity and the get-passive in Philippine and British English: a corpus-based contrastive study. *Philippine Journal of Linguistics*, 41, 1-13.
- American Association for Applied Linguistics. (1997). Resolution on the application of dialect knowledge to education. Paper presented at the Annual Meeting of AAAL, Orlando.
- Ansaldo, U. (2009). *Contact Languages: Ecology and Evolution in Asia*. Cambridge: Cambridge University Press.
- Ansaldo, U. (2009). The Asian typology of English. *English World-Wide*, 30(2), 133-148.
- Anson, G. (1748). *A voyage round the world in the years MDC-CXL, I, II, III, IV*. London: John and Paul Knapton of Ligate Street.
- Babasa, J. (1982). *The Development of Linguistic Attitudes Towards Guamanian Dialect English and Standard English*. (Master's Thesis). University of Guam.
- Babauta, L. (2018). *War Atrocities: Manenggon Concentration Camp*. Retrieved from Guampedia: <https://www.guampedia.com/war-atrocities-manenggon-concentration-camp/>
- Bailey, G. (2016). Automatic detection of sociolinguistic variation using forced alignment. *University of Pennsylvania Working Papers in Linguistics*, 22(2), 9-20.
- Bailey, G., & Thomas, E. (1998). Some aspects of African American Vernacular English Phonology. In S. Mufwene, J. Rickford, G. Bailey, & J. Baugh (Eds.), *African American English: structure, history, and use* (pp. 85-109). London: Routledge.
- Bamgbose, A. (1998). Torn between the norms: innovations in World Englishes. *World Englishes*, 17(1), 1-14.
- Barusch, A., & Spaulding, M. (1989). The impact of americanization on intergenerational relations: an exploratory study on the US territory of Guam. *Journal of Sociology and Welfare*, 16(3), 83-122.
- Bautista, M. (1996). Notes on three sub-varieties of Philippine English. In M. L. Bautista (Ed.), *Readings in Philippine sociolinguistics* (pp. 93-101). Manila: De La Salle University Press.
- Bautista, M. (2000). *Defining Standard Philippine English: Its status and grammatical features*. Manila: De La Salle University Press.
- Bautista, M. (2001a). Attitudes of English language faculty in three leading Philippine universities towards Philippine English. *Asian Englishes*, 4(1), 4-32.
- Bautista, M. (2001b). Attitudes of selected Luzon University students and faculty towards Philippine English. In M. L. Tayao (Ed.), *Rosario E. Maminta in focus: Selected writings in applied linguistics* (pp. 263-273). Quezon, the Philippines: Philippine Association of Language Teaching.
- Bautista, M. L., & Bolton, K. (2009). *Philippine English: Linguistic and literary perspectives*. Philippines: Hong Kong University Press.
- Bayard, D., Weatherall, A., Gallois, C., & Pittam, J. (2001). Pax Americana? Accent attitudinal evaluations in New Zealand, Australia and America. *Journal of Sociolinguistics*, 5(1), 22-49.
- Bayard, D., & Sullivan, K. (2000a). Perception of country of origin and social status of English speakers by Swedish and New Zealand listeners. In A. Botinis, & N. Torstensson (Eds.), *Proceedings of Fonetik 2000* (pp. 33-36). Skövde: Höskolan Skövde.

- Bayard, D., & Sullivan, K. (2000b). A taste of Kiwi: Does the Swedish palate differ from New Zealanders'? In A. Botinis, & N. Torstensson (Eds.), *Proceedings of Fonetik 2000* (pp. 37-40). Skövde: Högskolan Skövde.
- Becker, K. (2013). The Sociolinguistic interview. In C. Mallison, B. Childs, & G. Van Herk (Eds.), *Data Collection in Sociolinguistics: Methods and applications*, (pp. 91-100). New York: Routledge.
- Beckford Wassink, A. (2016). The vowels of Washington State. *Publication of the American Dialect Society 101: Speech in the Western States*, 101(1), 77-105.
- Bernstein, C. (1993). Measuring social causes of phonological variation in Texas. *American Speech*, 68(3), 227-240.
- Betances, S. (1980). Cross-cultural education and ethnic conflict in Guam. *NABE Journal*, 5(1), 71-91.
- Blommaert, J. (2007). On scope and depth in linguistic ethnography. *Journal of Sociolinguistics*, 11, 682-688.
- Bloom, D., & Grenier, G. (1996). Language, employment and earnings in the United States: Spanish-English differentials from 1970 to 1990. *International Journal of the Sociology of Language*, 121, 45-68.
- Blust, R. (2000). Chamorro historical phonology. *Oceanic Linguistics*, 39(1), 83-122.
- Blyth, C., Recktenwald, S., & Wang, J. (1990). I'm like, 'say what?!': A new quotative in American oral narrative. *American Speech*, 65(3), 215-27.
- Bolton, K., & Bautista, M. L. (2008). Introduction - Philippine English: Linguistic and literary perspectives. In M. L. Bautista, & K. Bolton (Eds.), *Philippine English: linguistic and literary perspectives* (pp. 1-9). Hong Kong: Hong Kong University Press.
- Bolton, K., & Butler, S. (2008). Lexicography and the description of Philippine English vocabulary. In M. L. Bautista, & K. Bolton (Eds.), *Philippine English: Linguistic and Literary Perspectives* (pp. 175-200). Hong Kong : Hong Kong University Press.
- Borlongan, A. (2016). Relocating Philippine English in Schneider's dynamic model. *Asian Englishes*.
- Borolongan, A. (2009). A survey on language use, attitudes, and identity in relation to Philippine English among young generation Filipinos: An initial sample from a private university. *The Philippine ESL Journal*, 3, 74-107.
- Britain, D. (2002). Diffusion, levelling, simplification and reallocation in past tense BE in the English Fens. *Journal of Sociolinguistics*, 6(1), 16-43.
- Britain, D. (2016). Sedentarism and nomadism in the sociolinguistics of dialect. In N. Coupland (Ed.), *Sociolinguistics: Theoretical Debates* (pp. 217-241). Cambridge: Cambridge University Press.
- Britain, D., & Matsumoto, K. (2015). Palauan English. In J. Williams, E. Schneider, P. Trudgill, & D. Schreier (Eds.), *Further studies in the lesser known varieties of English* (pp. 305-343). Cambridge: Cambridge University Press.
- Britain, D., & Matsumoto, K. (forthcoming). *English in paradise?: Emergent varieties in Micronesia*. Berlin: Mouton de Gruyter.
- Brook, M., Tagliamonte, S., & Jankowski, B. (2018). 'I don't come off as timid anymore': Real-time change in early adulthood against the backdrop of the community. *Journal of Sociolinguistics*, 1-45.
- Brooks, D. (2014). *Newspapers*. Retrieved from Guampedia: <http://www.guampedia.com/newspapers/>

- Brunner, T. (2014). Structural nativization, typology and complexity: noun phrase structures in British, Kenyan and Singaporean English. *English Language and Linguistics*, 18(1), 23-48.
- Buchstaller, I., & Khattab, G. (2013). Population samples. In R. Podesva, & D. Sharma (Eds.), *Research methods in linguistics* (pp. 74-95). Cambridge University Press.
- Buschfeld, S. (2014). English in Cyprus and Namibia: A critical approach to taxonomies and models of World Englishes and second language acquisition research. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The Evolution of Englishes: The Dynamic Model and beyond* (pp. 181-203). Amsterdam and Philadelphia: John Benjamins.
- Camillieri, A. (1996). Language values and identities: Code switching in secondary classrooms in Malta. *Linguistics and Education*, 8(1), 85-103.
- Carano, P., & Sanchez, P. (1964). *A complete history of Guam*. Rutland, Vermont, Tokyo: Charles E. Tuttle Co., Inc.
- Cardoso, A., Hall-Lew, L., Kementchedjhieva, Y., & Purse, R. (2016). between California and the Pacific Northwest: the front lax vowels in San Francisco English. *American Dialect Society*, 101(1).
- Cassar, C. (2001). Malta: Language, literacy and identity in a mediterranean island society. *National Identities*, 3.
- Census Briefs. (2010). *The Native Hawaiian and Other Pacific Islander Population: 2010*. Retrieved from Census: <https://www.census.gov/prod/cen2010/briefs/c2010br-12.pdf>
- Chamorro Language & Culture. (2008). *Foreign Loan-Words in Chamorro*. Retrieved from Chamorro Language and Culture: <http://chamorrolanguage.blogspot.com/2008/05/foreign-loan-words-in-chamorro.html>
- Chamorro Studies & Special Projects Division Mission. (n.d.). *Chamorro studies & special projects division mission*. Retrieved from Dibision inestudion Chamoru yan espesiaat na prugraama siha: <https://sites.google.com/a/gdoe.net/dibision-inestudion-chamoru-yan-espesiaat-na-prugraama-siha/home/mision>
- Champaco Mendiola, T. (2018). *Animism*. Retrieved from Guampedia: <https://www.guampedia.com/animism/>
- Cheng, A., Faytak, M., & Cychosz, M. (2016). Language, race, and vowel space: Contemporary Californian English. *Proceedings of BLS 42*. Berkeley Linguistics Society.
- Cheshire, J. (2002). Sex and gender in variationist research. In J. K. Chambers, P. Trudgill, & N. Schilling-Estes (Eds.), *The Handbook of Language Variation and Change* (pp. 423-443). Malden and Oxford: Blackwell.
- Cheshire, J., Kerswill, P., Fox, S., & Torgersen, E. (2011). Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguistics*, 15(2), 151-196.
- Chung, S. (1990). VP's and Verb Movement in Chamorro. *Natural Language & Linguistic Theory*, 8(4), 559-619.
- CIA. (n.d.). *The world factbook*. Retrieved from Central Intelligence Agency: <https://www.cia.gov/library/publications/the-world-factbook/geos/gq.html>
- Clachar, A. (1997). Resistance to the English language in Puerto Rico: Toward a theory of language and intergroup distinctiveness. *Linguistics and Education* (9), 69-98.
- Clampitt-Dunlap, S. (1995). *Nationalism, native language maintenance and the spread of English: A comparative study of the cases of Guam, the Philippines and Puerto Rico*

- (Unpublished Doctoral Dissertation). Rio Piedras, Puerto Rico: University of Puerto Rico.
- Clarke, S. (2010). Newfoundland and Labrador English. In D. Schreier, P. Trudgill, E. Schneider, & J. Williams (Eds.), *The lesser-known varieties of English - an introduction* (pp. 72-91). Cambridge: Cambridge University Press.
- Clarke, S., Ford, E., & Amani, Y. (1995). The Third dialect of English: Some Canadian evidence. *Language Variation and Change*, 7(2), 209-228.
- Clopper, C., Pisoni, D., & de Jong, K. (2005). Acoustic characteristics of the vowel systems of six regional varieties of American English. *The Journal of the Acoustical Society of America*, 118(3 Pt 1), 1661-1676.
- Coggshall, E. (2015). American Indian English. In J. Williams, E. Schneider, P. Trudgill, & D. Schreier (Eds.), *Further studies in the lesser-known varieties of English* (pp. 99-127). Cambridge: Cambridge University Press.
- Cook, M., & Sharp, M. (1966). Problems of Navajo speakers in learning English. *Language Learning*, 16, 21-29.
- Crocombe, R. (1995). *The Pacific islands and the USA*. Suva, Fiji: Institute of Pacific Studies, University of the South Pacific.
- Crocombe, R. (2007). *Asia in the Pacific islands: replacing the West*. Suva, Fiji: IPS Publications, University of the South Pacific.
- Crosby, A. (1986). *Ecological imperialism: The biological expansion of Europe, 900-1900*. Cambridge: Cambridge University Press.
- Dailey-O'Cain, J. (2000). The sociolinguistic distribution of and attitudes toward focuser like and quotative like. *Journal of Sociolinguistics*, 4(1), 60-80.
- De Decker, P., & Nycz, J. (2013). The technology of conducting sociolinguistic interviews. In C. Mallison, B. Childs, & G. Van Herk (Eds.), *Data collection in sociolinguistics: Methods and applications* (pp. 118-126). New York: Routledge.
- Deterding, D. (2014). The evolution of Brunei English: How it is contributing to the development of English in the world. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The Evolution of Englishes: The Dynamic Model and beyond* (pp. 420-433). Amsterdam and Philadelphia: John Benjamins.
- Di Paolo, M., Yaeger-Dror, M., & Beckford Wassink, A. (2010). Analyzing vowels. In M. Di Paolo, & M. Yaeger-Dror (Eds.), *Sociophonetics: A student's guide* (pp. 87-106). Oxford and New York: Routledge.
- Dillard, J. (1970). Principles in the history of American English: Paradox, virginity, cafeteria. *Florida FL Reporter*, 7, 32-33.
- Dixon, B. (2015). *Ancient Chamorro warfare*. Retrieved from Guampedia: <http://www.guampedia.com/ancient-guam-warfare/>
- Dodsworth, R. (2014). Speech communities, social networks and communities of practice. In J. Holmes, & K. Hazen (Eds.), *Research Methods in Sociolinguistics: A Practical Guide* (pp. 262-275). John Wiley and Sons, Inc.
- Drager, K. (2012). Pidgin and Hawai'i English: An overview. *International Journal of Language, Translation and Intercultural Communication*, 1, 61-73.
- Drager, K., & Hay, J. (2012). Exploiting random intercepts: Two case studies in sociophonetics. *Language Variation and Change*, 24, 59-78.

- Drager, K., Kirtley, M., Grama, J., & Simpson, S. (2013). Language Variation and Change in Hawai'i English: KIT, DRESS, and TRAP. *University of Pennsylvania Working Papers in Linguistics*, 19(2) (Selected Papers from NWAV 41), 40-50.
- Eberle, N., & Schreier, D. (2013). African Bermudian English and the Caribbean connection. *English World-Wide*, 34(3), 279-304.
- Eckert, P. (2000). *Linguistic variation as social practice*. Malden, MA: Blackwell.
- Eckert, P. (2008). Where do ethnolects stop? *International Journal of Bilingualism*, 12(1&2), 25-42.
- ELAN (Version 5.0) [Computer Software]. (2017). Nijmegen: Max Planck Institute for Psycholinguistics. Retrieved from <https://tla.mpi.nl/tools/tla-tools/elan/>.
- Essossomo, S. (2015). The fallacy of promoting non native varieties of English in postcolonial multilingual settings: The case of Cameroon English (CamE) in Cameroon. *Journal of Education and Practice*, 6(31), 95-101.
- Eugenio, H. (2017). Guam Pacific Daily News. *Guam Pacific Daily News*.
- Evanini, K., Isard, S., & Liberman, M. (2009). *Automatic formant extraction for sociolinguistic analysis of large corpora*. Paper presented at Interspeech 2009, Brighton, UK.
- Faingold, E. (2017). Language rights in the constitutions, organic acts, and statutes of the territories of the United States and the Freely Associated States. *Language Problems and Language Planning*, 41(2), 103-114.
- Fasold, R. (1990). *Sociolinguistics of language*. Oxford: Blackwell Publishers.
- Fayer, J. M. (2000). Functions of English in Puerto Rico. *International Journal of the Sociology of Language*, 142(1), 89-102.
- Feagin, C. (1986). More evidence for vowel change in the South. In D. Sankoff (Ed.), *Diversity and Diachrony* (pp. 83-95). Amsterdam and Philadelphia: John Benjamins.
- Flores, J. (2002). The Re-creation of Chamorro Dance as Observed Through the Festival of Pacific Arts. *Pacific Arts*, 25, 47-63.
- Florido, A., & Meraji, S. (2019). *America's Concentration Camps?* Retrieved from National Public Radio: <https://www.npr.org/templates/transcript/transcript.php?storyId=738247414>
- Foster, D., & Hoffman, R. (1966). Some observations on the vowels of Pacific Northwest English (Seattle Area). *American Speech*, 41(2), 119-122.
- Fought, C. (1999). A majority sound change in a minority community: /u/- fronting in Chicano English. *Journal of Sociolinguistics*, 3(1), 5-23.
- Fought, C. (2003). *Chicano English in context*. New York: Macmillan.
- Freeman, D. (2010). *The Pacific*. New York: Routledge.
- Fridland, V. (2000). The Southern Vowel Shift in Memphis, Tennessee. *Language Variation and Change*, 11, 267-285.
- Fridland, V. (2001). The social dimension of the Southern Vowel Shift: Gender, age and class. *Journal of Sociolinguistics*, 5(2), 233-253.
- Fridland, V. (2003). Network Strength and the Realization of the Southern Vowel Shift among African Americans in Memphis, Tennessee. *American Speech*, 78(1), 3-30.
- Friginal, E. (2007). Outsourced call centers and English in the Philippines. *World Englishes*, 26(3), 331-345.
- Fritz, G. (2001). *The Chamorro. A history and ethnography of the Mariana Islands*. N.M.I. Division of Historic Preservation.

- Fruehwald, J. (2013). *The phonological influence on phonetic change* (Doctoral Dissertation). University of Pennsylvania, PA. Retrieved from <https://repository.upenn.edu/edissertations/862/>.
- Fruehwald, J. (2017). Generations, lifespans, and the Zeitgeist. *Language Variation and Change*, 29, 1-27.
- Görlach, M. (2002). *Still more Englishes*. Amsterdam and Philadelphia: John Benjamins.
- Gaynell Pool Layne, P. (1970). *Modern linguistic theory and language instruction in a bilingual milieu: developing a strategy for primary English instruction on Guam* (Doctoral Dissertation). University of Pittsburgh.
- Gentry, E. (2006). *Hovering between South and West: Houston's merged dialect*. Paper presented at NWAV 35, the Ohio State University.
- Giles, H. (1979). Ethnicity markers in speech. In K. Scherer, & H. Giles (Eds.), *Social markers in speech* (pp. 251-89). Cambridge: Cambridge University Press.
- Godinez, M., & Maddieson, I. (1985). Vowel differences between Chicano and General Californian English? *International Journal of the Sociology of Language*, 53, 43–58.
- Gonzales, W. (2017). Philippine Englishes. *Asian Englishes*, 19(1), 79-95.
- Gonzalez, A. (2003). A favorable climate and soil: a transplanted language and literature. In M. L. Bautista, & K. Bolton (Eds.), *Philippine English: Linguistic and literary perspectives* (pp. 13-28). Hong Kong: Hong Kong University Press.
- Gonzalez, A., Jambalos, T., & Romero, M. (2003). *Three studies on Philippine English across generations: Towards an integration and some implications*. Manila, the Philippines: Linguistic Society of the Philippines.
- Goodman, L. (1961). Snowball Sampling. *Annals of Mathematical Statistics*, 32, 148-170.
- Gootnick, D. (2016). *Compacts of free association: Issues associated with implementation in Palau, Micronesia, and the Marshall Islands*. Washington, DC: U.S. Government Accountability Office.
- Gordon, M. (2002). Investigating chain shifts and mergers. In J. K. Chambers, P. Trudgill, & N. Schilling-Estes (Eds.), *The handbook of language variation and change* (pp. 244-266). Malden, MA/Oxford: Blackwell.
- Gordon, M. (2004). The West and Midwest: Phonology. In B. Kortmann, E. W. Schneider, K. Burridge, R. Mesthrie, & C. Upton (Eds.), *A handbook of varieties of English: A multimedia reference tool, Vol. 1* (pp. 338-350). Berlin & New York: Mouton de Gruyter.
- Grin, F. (2001). English as economic value: facts and fallacies. *World Englishes*, 20(1), 65-78.
- Guam Bureau of Statistics and Plans. (2013). *Guam Statistical Yearbook 2012*. Hagatna, Guam: Office of the Governor.
- Guam Department of Education. (2017). *Home*. Retrieved from GDoE: <https://sites.google.com/a/gdoe.net/gdoe/>
- Guam Statistical Yearbook. (2011). *Guam statistical yearbook updates: Public assistance and social welfare*. Retrieved from Bureau of Statistics and Plans: http://bsp.guam.gov/index.php?option=com_content&view=article&id=137&Itemid=100010
- Guampedia. (2015). *Suruhānu yan Amot (Healers and Medicine)*. Retrieved from Guampedia: <https://www.guampedia.com/ancient-guam-suruhanu-yan-amot-healers-and-medicine/>
- Haagen, M. (1998). *Caught between norms: The English pronunciation of Dutch learners*. The Hague: Holland Academic Graphics.

- Habib, R. (2013). How to uncover social variables. In C. Mallison, B. Childs, & G. Van Herk (Eds.), *Data collection in sociolinguistics: Methods and application* (pp. 29-32). New York and Oxon: Routledge.
- Halliday, M., McIntosh, A., & Stevens, P. (1964). *The linguistic sciences and language teaching*. London: Longman.
- Hall-Lew, L. (2009). *Ethnicity and phonetic variation in a San Francisco neighborhood*. (Doctoral Dissertation), Stanford University.
- Hattori-Uchima, M. (2017). Chuukese migrant women in Guam: Perceptions of barriers to health care. *Asian/Pacific Island Nursing Journal*, 1(3), 19-28.
- Hay, J., Drager, K., & Brynmor, T. (2013). Using nonsense words to investigate vowel merger. *English Language and Linguistics*, 17(2), 241-269.
- Hay, J., Podlubny, R., Drager, K., & McAuliffe, M. (2017). Car-talk: location-specific speech production and perception. *Journal of Phonetics*, 65, 94-109.
- Hechanova, M. (2013). Personnel Review The call center as a revolving door: a Philippine perspective. *Personnel Review*, 42(3), 349-365.
- Heine, J., & Garcia-Passalacqua, J. (1983). The Puerto Rican question. *Headline Series*, 266.
- Hendery, R. (2015). Palmerston Island English. In J. Williams, E. Schneider, P. Trudgill, & D. Schreier (Eds.), *Further studies in the lesser-known varieties of English* (pp. 267-287). Cambridge: Cambridge University Press.
- Hess, D. (2017). Quotatives in Saipanese English: Be like on the move. *International Conference on Language Variation in Europe (ICLaVE9)*. Malaga: University of Malaga.
- Higuchi, W. (2001). The Japanisation policy for the Chamorros of Guam, 1941-1944. *The Journal of Pacific History*, 36(1), 19-35.
- Hinton, L., & Pollock, K. (2000). Regional variations in the phonological characteristics of African American Vernacular English. *World Englishes*, 19(1), 59-71.
- Hinton, L., Moonwomon, B., Bremner, S., Luthin, H., Van Clay, M., Lerner, J., & Corcoran, H. (1987). It's not just the Valley Girls: A study of California English. In J. Aske, N. Beery, L. Michaelis, & H. Filip, *Berkeley Linguistics Society: Proceedings of the Thirteenth Annual Meeting, February 14-16* (pp. 117-128). Berkeley, California: Berkeley Linguistics Society.
- Honorof, D. (2003). Reference vowels and lexical sets in accent acquisition. *Voice and Speech Review*, 3(1), 106-122.
- Indalecio, A. (1999). *Policies and practices of Chamorro cultural narratives in the community and schools of Guam. (Areklamento yan I manmapraktitika siha na pason i kotturan Chamorro gi kumunidat yan I eskeulan Guahan siha)*. University of Arizona: (Unpublished Doctoral Dissertation) Arizona.
- Internet World Stats. (2017). *Internet usage and population statistics for Oceania*. Retrieved from Internet World Stats: <https://www.internetworldstats.com/stats6.htm>
- Iwasaki, S. (2002). *London oriental and African language library*. John Benjamins.
- Jenkins, J. (2003). *World Englishes: A resource book for students*. London: Routledge.
- Joseph, A., & Murray, V. (1951). *Chamorros and Carolinians of Saipan: Personality studies*. MA: Harvard University Press.
- Kachru, B. (1985). Standards, codification, and sociolinguistic realism: The English language in the outer circle. In R. Quirk, & H. G. Widdowson (Eds.), *English in the World: Teaching and learning the language and literatures* (pp. 11-30). Cambridge: Cambridge University Press.

- Kachru, B. (1992). Models for non-native Englishes. In B. Kachru (Ed.), *The Other Tongue: English Across Cultures* (pp. 48-74). Chicago: Illinois University Press.
- Kachru, B., & Smith, L. (1985). Editorial. *World Englishes*, 4, 209-212.
- Kehoe, M. (1975). Language and Politics in Guam and Micronesia. *Paper presented at the TESOL Conference*. Los Angeles.
- Kendall, T., & Fridland, V. (2012). Variation in perception and production of mid front vowels in the U.S. Southern Vowel Shift. *Journal of Phonetics*, 40(2), 289-306.
- Kennedy, R., & Grama, J. (2012). Chain shifting and centralization in California vowels: An acoustic analysis. *American Speech*, 87(1), 39-56.
- Kerswill, P. (1996). Children, adolescents and language change. *Language Variation and Change*, 8, 177-202.
- Kerswill, P., & Williams, A. (2000). Creating a new town koine: Children and language change in Milton Keynes. *Language in Society*, 29, 65-115.
- Kim, Y.-K. (2015). *Asians traveling to learn English*. Retrieved from Pacific Daily News: <https://eu.guampdn.com/story/opinion/2015/06/27/guam-asian-travel-study-english-uog-university-of-guam/29383387/>
- Kirkpatrick, A. (2007). *World Englishes: Implications for international communication and English language teaching*. Edinburgh: Cambridge University Press.
- Kirkpatrick, A., & Subhan, S. (2014). Non-standard or new standards or errors? The use of inflectional marking for present and past tenses in English as an Asian lingua franca. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The Evolution of Englishes - The Dynamic Model and Beyond* (pp. 386-400). Amsterdam and Philadelphia: John Benjamins.
- Kirtley, M., Grama, J., Drager, K., & Simpson, S. (2016). An acoustic analysis of the vowels of Hawai'i English. *Journal of the International Phonetic Association*, 46(1), 1-19.
- Koops, C., Gentry, E., & Pantos, A. (2008). The effect of perceived speaker age on the perception of PIN and PEN vowels in Houston, Texas. *University of Pennsylvania Working Papers in Linguistics: Selected Papers from NWAV 36*, 14(2), 90-101.
- Kortmann, B. (2010). Variation across Englishes: Syntax. In A. Kirkpatrick (Ed.), *Routledge Handbook of World Englishes* (pp. 400-424). London: Routledge.
- Kortmann, B., & Lukenheimer, K. (2013). *The Electronic World Atlas of Varieties of English*. Leipzig: Max Planck Institute of Evolutionary Anthropology (Available online at <http://ewave-atlas.org>, Accessed on 2018-07-20).
- KUAM News. (n.d.). The history of KUAM. Retrieved from KUAM News: <https://www.kuam.com/story/10863272/the-history-of-kuam>
- Kuper, K. (2014). *Na'la'la' i hila'-ta, na'matatnga i taotao-ta: Chamorro language as liberation from colonization*. Honolulu: University of Hawaii at Manoa.
- Labov, W. (1963). The Social Motivation of a Sound Change. *Word*, 19, 273-309.
- Labov, W. (1966). *The Social Stratification of English in New York City*. Washington, DC: Center for Applied Linguistics.
- Labov, W. (1972a). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W. (1972b). *Language in the Inner City: Studies in the Black English Vernacular*. Philadelphia: University of Philadelphia Press.
- Labov, W. (1984). Field Methods of the Project on Linguistic Change and Variation. In J. Baugh, & J. Sherzer (Eds.), *Language in Use* (pp. 28-53). Englewood Cliffs, NJ: Prentice-Hall.

- Labov, W. (1991). The three dialects of English. In P. Eckert (Ed.), *New Ways of Analyzing Variation* (pp. 1-44). New York: Academic Press.
- Labov, W. (1994). *Principles of Linguistic Change. Volume 1: Internal Factors*. Oxford, U.K.: Blackwell.
- Labov, W. (2001). *Principles of Linguistic Change, Volume 2: Social Factors*. Malden, Massachusetts and Oxford, U.K.: Blackwell.
- Labov, W. (2001). The Anatomy of Style-Shifting. In P. Eckert, & J. R. Rickford (Eds.), *Style and Sociolinguistic Variation* (pp. 85-108). Cambridge University Press.
- Labov, W. (2007). Transmission and diffusion. *Language*, 83, 344-387.
- Labov, W. (2010). *Principles of linguistic change: Cognitive and cultural factors*. Wiley-Blackwell.
- Labov, W., Ash, S., & Boberg, C. (2006). *The Atlas of North American English*. De Gruyter Mouton.
- Lance, D. (1999). Regional Variation in Subjective Dialect Divisions in the United States. In D. Preston (Ed.), *The handbook of perceptual dialectology, vol 1* (pp. 283-314). Amsterdam: Benjamins.
- Leemann, A., Kolly, M.-J., Purves, R., Britain, D., & Glaser, E. (2016). Crowdsourcing big data in dialectology - the case of Swiss German (Unpublished). *Sociolinguistics Symposium 21*. Murcia: University of Murcia.
- Leibowitz, A. (1989). *Defining status: A comprehensive analysis of U.S. territorial policy*. Dordrech: Martinus Nijhoff Publishers.
- LePage, R., & Tabouret-Keller, A. (1985). *Acts of Identity*. London: Cambridge University Press.
- Levisen, C. (2018). *Postcolonial Prepositions: Semantics and Geopolitics in the Danosphere*. Conference paper: Zurich Conference on Colonial and Postcolonial Language Studies – Changes and Challenges.
- Levon, E. (2013). Ethnography and Recording Interaction. In R. Podesva, & S. Devyani (Eds.), *Research Methods in Linguistics* (pp. 195-216). Cambridge University Press.
- Lewis, E. (1946). The curriculum that's changing Guam. *The Journal of Education*, 129(3), 98-99.
- Lewis, M., Simons, G., & Fennig, C. (2016). *Ethnologue: Languages of the world, nineteenth edition*. Dallas, TX: SIL International.
- Lim, L. (2010). Peranakan English in Singapore. In D. Schreier, P. Trudgill, E. Schneider, & J. Williams (Eds.), *The lesser-known varieties of English - an introduction* (pp. 327-347). Cambridge, UK: Cambridge University Press.
- Llamzon, T. (1997). The phonology of Philippine English. In M. Bautista, *English is an Asian Language: The Philippine Context* (pp. 41-48). Sydney: The Macquarie Library.
- Llmazon, T. (1969). *Standard Filipino English*. Quezon City: Ateneo de Manila University Press.
- Lobanov, B. (1971). Classification of Russian vowels spoken by different speakers. *The Journal of the Acoustic Society of America*, 49, 606-608.
- Lockwood, J., Forey, G., & Price, H. (2008). English in Philippine call centers and BPO operations: Issues, opportunities and research. In M. L. Bautista, & K. Bolton (Eds.), *Philippine English: Linguistic and Literary* (pp. 219-241). Hong Kong: Hong Kong University Press.
- Long, D. (2007). *English on the Bonin (Ogasawara) Islands*. Duke University Press.

- Lorente, B. (2018). *Scripts of Servitude - Language, labor migration and transnational domestic work*. Bristol, Blue Ridge Summit: Multilingual Matters.
- Lowenberg, P. (1986). Non-native varieties of English: nativization, norms and implications. *SSLA*, 8(1), 1-18.
- Mühlhäusler, P. (1992). Preserving languages or language ecologies? A top-down approach to language survival. *Oceanic Linguistics*, 31(2), 163-180. Retrieved from <https://www.jstor.org/stable/3623012>.
- Mack, S., & Munson, B. (2012). The influence of /s/ quality on ratings of men's sexual orientation: Explicit and implicit measures of the 'gay lisp' stereotype. *Journal of Phonetics*, 40, 198-212.
- MacKenzie, L., & Turton, D. (2013). *Crossing the pond: Extending automatic alignment techniques to British English data*. Paper presented at NWAV 42, University of Pittsburgh/Carnegie Mellon University.
- Mair, C. (2014). Does money talk and do languages have price tags? - Economic perspectives on English as a global language. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The Evolution of Englishes: The Dynamic Model and beyond* (pp. 249-266). Amsterdam and Philadelphia: John Benjamins.
- Matsumoto, K. (2001). Multilingualism in Palau: Language contact with Japanese and English. In T. McAuley (Ed.), *Language change in East Asia* (pp. 84-142). London: Curzon Press.
- Matsumoto, K. (2010). The role of social networks in the post-colonial multilingual island of Palau: Mechanisms of language maintenance and shift. *Multilingua: Journal of Cross-Cultural and Interlanguage Communication*, 29(2), 133-165.
- Mazzon, G. (1993). English in Malta. *English World-Wide*, 14(2), 171-208.
- McArthur, T. (1998). *The English Languages*. Cambridge: Cambridge University Press.
- McCormick, K. (2012). English and other languages. In P. Seargeant, & J. Swann (Eds.), *English in the World* (pp. 245-283). Abingdon: Routledge.
- McFarland, C. (2008). Linguistic diversity and English in the Philippines. In M. Bautista, & K. Bolton (Eds.), *Philippine English: Linguistic and Literary Perspectives* (pp. 131-155). Hong Kong: Hong Kong University Press.
- Mendoza-Denton, N. (2008). *Homegirls: Language and cultural practice among Latina youth gangs*. Oxford: Blackwell.
- Mesthrie, R. (2006). Contact Linguistics and World Englishes. In B. Kachru, Y. Kachru, & C. Nelson (Eds.), *The Handbook of World Englishes* (pp. 273-286). Blackwell Publishing Ltd.
- Meyerhoff, M. (2013). Bislama. In B. Kortmann, & K. Lukenheimer (Eds.), *The Electronic World Atlas of Varieties of English*. (Available online at <http://ewave-atlas.org/languages/69>, Accessed on 2019-03-06.). Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Meyerhoff, M., & Schlee, E. (2010). Sociolinguistic Methods for Data Collection and Interpretation. In M. Meyerhoff, & E. Schlee (Eds.), *The Routledge Sociolinguistics Reader* (pp. 1-26). London and New York: Routledge.
- Micronesia Publishing. (2018, May 21). *MARC Seminar Series - 2nd Installment: Eva Kuske*. Retrieved from YouTube: <https://www.youtube.com/watch?v=biTd5B2YffU&t=177s>
- Mills, R. (1950). *Oregon Speechways*. New York: Columbia University Press.
- Milroy, J., & Milroy, L. (1985). *Authority in Language*. London: Routledge.

- Milroy, L., & Gordon, M. (2003). *Sociolinguistics: Method and Interpretation*. Malden MA: Blackwell.
- Moag, R. (1992). The life cycle of non-native Englishes: A case study. In B. Kachru (Eds.), *The other tongue: English across cultures 2nd edn* (pp. 233-252). Chicago: University of Illinois Press.
- Mobärg, M. (1999). School goes to Hollywood: Attitudes towards British and American English among Swedish school students. In C. Paradis (Ed.), *Recent trends in the pronunciation of English: Social, regional and attitudinal aspects* (pp. 49-70). Stockholm: Almqvist and Wiksell International.
- Mohr, E. (1998). English versus Spanish in Puerto Rico. In L.-D. Bender, *The American presence in Puerto Rico (series)*. San German: Centro de Investigaciones del Caribe y America Latina.
- Mufwene, S. (2001). *The ecology of language evolution*. Cambridge, UK: Cambridge University Press.
- Mufwene, S. (2006). Pidgins and Creoles. In B. B. Kachru, Y. Kachru, & C. L. Nelson (Eds.), *The handbook of World Englishes* (pp. 313-327). Blackwell Publishing Ltd.
- Mufwene, S. (2010). Globalization, Global English, and World English(es): myths and facts. In N. Coupland (Ed.), *The Handbook of Language and Globalization* (pp. 31-55). Blackwell Publishing.
- Murphy, S. (2019). *WWII: Oral war histories of the Chamoru people*. Retrieved from Guampedia: https://www.guampedia.com/wwii-oral-war-histories-of-the-chamorro-people/#Forced_march_and_concentration_camps
- n.a. (1925). *English in the schools of Guam*. Guam Recorder
- n.a. (2017). *The world fact book*. Retrieved from Central Intelligence Agency: <https://www.cia.gov/library/publications/the-world-factbook/fields/2018.html#gq>
- n.a. (2019). *Maps of Oceania*. Retrieved from Geographic Guide: <https://www.geographicguide.com/oceania-maps/guam.htm>
- National Priorities Project Database. (2004). *Total military recruits: Army, Navy, Air Force (per capita) by state*. Retrieved from National Priorities Project Database: http://www.StateMaster.com/graph/mil_tot_mil_rec_arm_nav_air_for_percap-navy-air-force-per-capita
- National Statistics Office. (2000). *Census of population and housing. Report No. 2: Socio-economic and demographic characteristics Philippines*. Manila, Philippines: National Statistics Office.
- Negron de Montilla, A. (1971). *Americanization in Puerto Rico and the public school system 1890–1930*. Rio Piedras: Editorial Edil.
- Nelson, F. (2009). *The History of KUAM*. Retrieved from KUAM: <http://www.kuam.com/story/10863272/the-history-of-kuam>
- Nelson-Barber, S. (1982). Phonologic variations of Pima English. In R. St. Clair, & W. Leap (Eds.), *Language renewal among American Indian tribes: issues, problems, and prospects* (pp. 122-123). Arlington, VA: National Clearing House for Bilingual Education .
- Newman, M. (2007). New York tawk. In W. Wolfram, & B. Ward (Eds.), *American Voices: How dialects differ from coast to coast* (pp. 82-87). Malden: Blackwell.

- Newman, M., & Wu, A. (2011). "Do you sound Asian when you speak English?" Racial identification and voice in Chinese and Korean American's English. *American Speech*, 86(2) 152-178.
- Nickels, E. (2005). English in Puerto Rico. *World Englishes*, 24(2), 227-237.
- Norman, J. (1988). *Chinese*. Cambridge: Cambridge University Press.
- Northrup, D. (2013). *How English Became the Global Language*. Houndmills: Palgrave Macmillan.
- Odo, C. (1970). English patterns in Hawai'i. *American Speech*, 45(3/4), 234-239.
- Odo, C. (1972). A Survey of Language use and attitudes in Guam. *Pacific and Asian Linguistics Institute*.
- Office of Planning and Statistics. (2015). *2015 census of population housing and agriculture for the Republic of Palau*. Koror.
- Oyama, S. (1973). *A sensitive period for the acquisition of a second language*. Cambridge, MA: Harvard University dissertation.
- Palomo, R. (1987). American policies and practices affecting language shift on Guam: 1898-1950. In M. Spencer (Ed.). *Chamorro Language Issues and Research on Guam*. Mangilao, GU: University of Guam. pp. 19-43.
- Payne, A. (1976). *The acquisition of the phonological system of a second dialect*. Philadelphia: University of Pennsylvania dissertation.
- Pefianco Martin, I. (2014). Beyond Nativization? - Philippine English in Schneider's Dynamic Model. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The evolution of Englishes* (pp. 70-86). Amsterdam and Philadelphia: John Benjamins.
- Pefianco Martin, I. (2014). Philippine English revisited. *World Englishes*, 33(1), 50-59.
- Penfield, J., & Ornstein-Galicia, J. (1985). *Chicano English: An ethnic contact dialect*. Amsterdam; Philadelphia: J. Benjamins Publishing Company.
- Penny, R. (2000). *Variation and Change in Spanish*. Cambridge: Cambridge University Press.
- Pereda, N. (2015). *Che'lu/Mañe'lu: Siblings*. Retrieved from Guampedia: <http://www.guampedia.com/che%E2%80%99lumanelu-siblings/>
- Peters, P. (1998). Australian English. In P. Bell, & R. Bell (Eds.), *Americanization and Australia Sydney* (pp. 32-44). UNSW Press.
- Peters, P. (2014). Differentiation in Australian English. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The Evolution of Englishes: The Dynamic Model and beyond* (pp. 107-124). Amsterdam: John Benjamins Publishing Company.
- Pierantozzi, S. (2000). Palauans and guest workers: An opinion paper. *The Contemporary Pacific*, 12(2), 349-358.
- Pitzer, A. (2017). *One long night: A global history of concentration camps*. Little, Brown and Company.
- Pobutsky, A., & Neri, E. (2014). Cultural integration and separation: The pre-historical and historical links between Guam and the Philippines, or where did all the Filipinos go? *Philippine Quarterly of Culture and Society*, 42(1/2), 1-15.
- Podesva, R. (2011). The California Vowel Shift and gay identity. *American Speech*, 86(1), 32-51.
- Pousada, A. (1999). The singularly strange story of the English language in Puerto Rico. *Milenio*, 3, 33-61.
- Preston, D. (1985). The Li'l Abner syndrome: Written representations of speech. *American Speech*, 60, 328-336.

- Quan, C. (2010). From "Esteemed Colleagues" to "Steamed Collix": language use and accent awareness in Guam's Colloquial Chamorro English. *Micronesian Educator*, 14.
- Quan, C. (2014). *Filipinos on Guam: Cultural contributions*. Retrieved from Guampedia: <https://www.guampedia.com/filipinos-on-guam-cultural-contributions/>
- Reden, S., & Wolf, H.-G. (2014). Filipina domestic helpers in Hong Kong: Domestic language use, attitudes, and linguistic awareness—An empirical survey. *US-China Foreign Language*, 12(11), 863-880.
- Reed, C. (1952). The pronunciation of English in the state of Washington. *American Speech*, 27(3), 186-189.
- Reed, C. (1961). The pronunciation of English in the Pacific Northwest. *Language*, 37(4), 559-564.
- Reed, C. (1965). *Linguistic atlas of the Pacific Northwest (LAPNW)*. Athens: Special Collections repository of the Library, University of Georgia.
- Regala-Flores, E. (2016). Phonological features of basilectal Philippine English: An exploratory study. *Presented at the DLSU Research Congress 2016*. De La Salle University, Manila, Philippines.
- Reinecke, J., & Tokimasa, A. (1934). The English Dialect of Hawaii. *American Speech*, 9(1), 48-58.
- Reynolds, S. (1999). Mutual intelligibility?: Comprehension problems between American Standard English and Hawai'i Creole English in Hawai'i's public schools. In J. Rickford, & S. Romaine (Eds.), *Creole genesis, attitudes and discourse* (pp. 303-322). Amsterdam/Philadelphia: John Benjamins.
- Rice, L. (1976). Hardware & software for speech synthesis. *Dr. Dobb's journal of computer calisthenics & orthodontia*, 1(4), 6-8.
- Richards, J. (1979). Rhetorical and communicative styles in the new varieties of English. *Language Learning*, 29, 1-25.
- Rickford, J. (2002). The Ebonics controversy in my backyard: A sociolinguist's experiences and reflections. *Journal of Sociolinguistics*, 3(2), 267-275.
- Roberts, J., & Labov, W. (1995). Learning to talk Philadelphian: Acquisition of short a by preschool children. *Language Variation and Change*, 7, 101-112.
- Rodríguez-Ponga, R. (2002). *El elemento español en la lengua chamorra (Islas Marianas)*. (Doctoral Thesis). Madrid: Universidad Complutense de Madrid, Facultad de Filología.
- Rogers, R. (1995). *Destiny's Landfall. A History of Guam*. Honolulu: University of Hawai'i Press.
- Salas, A. (2014). *Kumpaire/Pari'*. Retrieved from Guampedia: <http://www.guampedia.com/kumpairepari/>
- Sanchez, P. (1987). *Guahan. Guam: The history of our island*. Agana, Guam: Author.
- Sand, A. (2004). Shared morpho-syntactic features in contact varieties of English: Article use. *World Englishes*, 23, 281-298.
- Sand, A. (2005). *Angloversals? Shared morpho-syntactic features in contact varieties of English*, (Postdoctoral Thesis). Freiburg; in preparation for Amsterdam: John Benjamins.
- Sand, A. (2008). Angloversals? Concord and interrogatives in contact varieties of English. In T. Nevalainen, I. Taavitsainen, P. Pahta, M. Korhonen (Eds.), *The Dynamics of linguistic variation: Corpus evidence on English past and present* (pp. 183-202). Amsterdam: John Benjamins.

- Sankoff, G. (1980). A quantitative paradigm for the study of communicative competence. In G. Sankoff (Ed.), *The social life of language* (pp. 47-79). University of Philadelphia Press.
- Santa Ana, O., & Bayley, R. (2004). Chicano English: phonology. In E. Schneider, K. Burridge, B. Kortmann, R. Mesthrie, & C. Upton (Eds.), *A handbook of varieties of English: Phonology* (pp. 417-434). Berlin and New York: Mouton de Gruyter.
- Santos, P., Leon Guerrero, M., Leon Guerrero, V., Pangelinian, B., Santos, M., Mantate, T., & Tydingco, D. (1992). *English the Chamoru way: shilver edition*. Guam: Images Publishing.
- Santos-Bamba, S. (2013). The languages of three generations of Chamorro women. *Pacific Asia Inquiry*, 4(1), 84-93.
- Saro-Wiwa, K. (1997). *Sozaboy*. Pearson.
- Sato, C. (1978). *Variation in Hawaiian Pidgin and Creole English*. MA Thesis, University of Hawai'i at Mānoa.
- Sato, C. (1993). Language change in a creole continuum: Decreolization? In K. Hyltenstam, & A. Viberg (Eds.), *Progression and regression in language: Sociocultural, neuropsychological, and linguistic perspectives* (pp. 122-143). New York: Cambridge University Press.
- Sawyer, J. (1957). *A Dialect Study of San Antonio, Texas: A Bilingual Community* (Unpublished Doctoral Dissertation), University of Texas.
- Sawyer, J. (1959). Aloofness from Spanish influence in Texas English. *WORD*, 15(2), 270-281.
- Sayers, D. (2014). The mediated innovation model: A framework for researching media influence in language change. *Journal of Sociolinguistics*, 18(2), 185-212.
- Schilling, N. (2013). *Sociolinguistic fieldwork*. New York: Cambridge University Press.
- Schilling-Estes, N. (1999). Situated ethnicities: Constructing and reconstructing identity in the sociolinguistic interview. *University of Pennsylvania Working Papers in Linguistics*, 6(2), 136-151.
- Schneider, E. (2003). The dynamics of new Englishes: From identity construction to dialect birth. *Language*, 233-281.
- Schneider, E. (2004). How to trace structural nativization: Particle verbs in world Englishes. *World Englishes*, 23, 227-249.
- Schneider, E. (2007). *Postcolonial English: Varieties around the World*. Cambridge: Cambridge University Press.
- Schreier, D. (2008). *Saint Helenian English*. John Benjamins Publishing.
- Schreier, D. (2010). Tristan da Cunha English. In D. Schreier, P. Trudgill, E. Schneider, & J. Williams (Eds.), *The lesser-known varieties of English: An introduction* (pp. 245-260). Cambridge: Cambridge University Press.
- Schreier, D. (2014). On cafeterias and new dialects. In S. Buschfeld, T. Hoffmann, M. Huber, & A. Kautzsch (Eds.), *The evolution of Englishes: The Dynamic Model and beyond* (pp. 231-248). Amsterdam and Philadelphia: John Benjamins.
- Schweers, C., & Vélez, J. (1992). To be or not to be bilingual in Puerto Rico: That is the issue. *TESOL Journal, Autumn*, 13-16.
- Senator Palomo, A., & Guam and Chamorro Educational Facility. (2018). *Mission and vision*. Retrieved from Guam Museum: <http://guammuseum.org/mission-vision-2/>
- Sharma, D. (2001). The pluperfect in native and non-native English: A comparative corpus study. *Language Variation and Change*, 13, 343-373.

- Sharma, D. (2005). Dialect stabilization and speaker awareness in non-native varieties of English. *Journal of Sociolinguistics*, 9(2), 194-224.
- Sharma, D. (2009). Typological diversity in New Englishes. *English World-Wide*, 30(2), 170-195.
- Shuy, R., Wolfram, W., & Riley, W. (1968). *Field techniques in an urban language study*. Washington, D.C.: Center for Applied Linguistics.
- Sibayan, B., & Gonzalez, A. (1996). Post-imperial English in the Philippines. In A. Conrad, & A. Rubal-Lopez (Eds.), *Post-imperial English status change in former British and American colonies, 1940-1990* (pp. 139-172). Mouton de Gruyter.
- Siegel, J. (2012). Regional profile: Australian Pacific region. In B. Kortmann, & K. Lukenheimer (Eds.), *The Mouton world atlas of variation in English* (pp. 765-782). Berlin: DeGruyter.
- Simo Bobda, A. (2000). Research on New Englishes: A critical review of some findings with a focus on Cameroon. *Arbeiten aus Anglistik und Amerikanistik*, 25, 53-70.
- Slomanson, P., & Newman, M. (2004). Peer group identification and variation in New York Latino English laterals. *English Worldwide*, 25, 199-216.
- Socialbakers. (2019). *Guam Facebook page statistics*. Retrieved from Socialbakers: <https://www.socialbakers.com/statistics/facebook/pages/total/guam/>
- Sohn, H.-M. (1999). *The Korean Language*. Cambridge: Cambridge University Press.
- Solenberger, R. (1962). The Social Meaning of Language Choice in the Marianas. *Anthropological Linguistics*, 4(1), 59-64. Retrieved from <https://www.jstor.org/stable/30022346>.
- Sons and Daughters of Guam. (2019). *Sons and Daughters of Guam*. Retrieved from Guam Club: <https://www.guamclub.org>
- St. John's. (2019). *St. John's at a glance*. Retrieved from St. John's Guam: <https://www.stjohnsguam.com/about.html>
- Station Index. (2017). Broadcasting Information Guide. Retrieved from Station Index: <https://www.stationindex.com/tv/markets/Guam>
- Stolz, T. (2010). Chamorro: Eine Sprache am Rande der romanisierten Welt. *Que Vadis Romania?*, 32, 56-71.
- Stolz, T. (2005). Review of: Giuseppe Brincat, Malta. Una storia linguistica. *Word*, 56(1), 133-6.
- Sudbury, A. (2001). Falkland Island English. A southern hemisphere variety? *English World-Wide*, 22(1), 55-80.
- Sussex, R. (1989). The Americanisation of Australian English: Prestige models in the media. In P. Collins, & D. Blair (Eds.), *Australian English: The language of a new society* (pp. 158-168). St Lucia Queensland, Australia: University of Queensland Press.
- Swiss National Science Foundation. (n.d.). *Open access to publications*. Retrieved from SNF: <http://www.snf.ch/en/theSNSF/research-policies/open-access/Pages/default.aspx>
- Tagliamonte, S. (2009). *Analysing sociolinguistic variation*. Cambridge University Press.
- Tagliamonte, S., & D'Arcy, A. (2009). Peaks beyond phonology: Adolescence, incrementation, and language change. *Language*, 85, 58-108.
- Taitano DeLisle, C. (2016). Destination Chamorro culture: Notes on realignment, rebranding, and post-9/11 militourism in Guam. *American Quarterly*, 68(3), 563-572.
- Taitano, G. (2014). *Kumision i fino' Chamorro/Chamorro language commission*. Retrieved from Guampedia: <http://www.guampedia.com/kumision-i-fino%E2%80%99-chamorrochamorro-language-commission/>

- Taitano, G. (2018). *Chamorros: A people divided*. Retrieved from Guampedia: <https://www.guampedia.com/chamorros-a-people-divided/>
- Taitano, G. (2018, June). *Kumision i dino' Chamorro/Chamorro language commission*. Retrieved from Guampedia: <https://www.guampedia.com/kumision-i-fino'-chamorrochamorro-language-commission/>
- Tay, M. (1982). The uses, users, and features of English in Singapore. In J. Pride (Ed.), *New Englishes* (pp. 51-70). Rowley, MA: Newbury House.
- Tayao, M. (2004). Philippine English: Phonology. In E. Schneider, K. Burridge, B. Kortmann, R. Mesthrie, & C. Upton (Eds.), *A handbook of varieties of English: Phonology*. Berlin and New York: Mouton de Gruyter.
- Tayao, M. (2004). The evolving study of Philippine English phonology. *World Englishes*, 23(1), 77-90.
- Tayao, M. (2008). A lectal description of the phonological features of Philippine English. In M. L. Bautista, & K. Bolton (Eds.), *Philippine English: Linguistic and literary perspectives* (pp. 157-174). Hong Kong: Hong Kong University Press.
- Taylor, B. (1989). American, British and other foreign influences. In P. Collins, & D. Blair (Eds.), *Australian English: The language of a new society* (pp. 225-254). St Lucia, Queensland: University of Queensland Press.
- Thomas, E. (1997). *A compendium of vowel plots*. Raleigh: Language and Life Project, Dept. of English, North Carolina State University.
- Thomas, E. (2001). *An acoustic analysis of vowel variation in New World English*. Durham, NC: Duke University Press.
- Thomason, S., & Kaufman, T. (1988). *Language contact, creolization, and genetic linguistics*. Los Angeles: University of California Press.
- Thompson, L. (1947). *Guam and its people*. Princeton University Press.
- Thusat, J., Anderson, E., Davis, S., Ferris, M., Javed, A., Laughlin, A., Wrubel, J. (2009). Maltese English and the nativization phase of the dynamic model. *English Today* 98, 25(2), 25-32.
- Tillery, J., & Bailey, G. (2004). The urban South: Phonology. In E. Schneider, K. Burridge, B. Kortmann, R. Mesthrie, & C. Upton (Eds.), *A handbook of varieties of English. Vol. 1: Phonology* (pp. 325-337). Berlin and New York: Mouton de Gruyter.
- Todd, L. (n.d.). *Pidginization and creolization*. Retrieved from Cambridge: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0267190500000477>
- Topping, D. (1969). *Spoken Chamorro*. Honolulu: University of Hawaii Press.
- Topping, D. (1973). *Chamorro reference grammar*. Honolulu: University of Hawaii Press.
- Topping, D. (2003). Saviors of languages: Who will be the real Messiah? *Oceanic Linguistics*, 42(2), 522-527.
- Topping, D., Ogo, P., & Dungca, B. (1975). *Chamorro-English dictionary*. Honolulu: University of Hawaii Press.
- Tourism Satellite Account. (2016). *The economic impact of tourism in Guam: Tourism satellite account calendar year 2015*. Tourism Economics.
- Trudgill, P. (1974). Linguistic change and diffusion: Description and explanation in sociolinguistic dialect geography. *Language in Society*, 3, 215-246.
- Trudgill, P. (1986). *Dialects in contact*. Oxford: Basil Blackwell Ltd.

- Trudgill, P. (2004). *New-dialect formation: the inevitability of colonial Englishes*. Edinburgh: Edinburgh University Press.
- Trudgill, P. (preprint). Bermudian English as a North American dialect: A note on the segmental phonology.
- Tydingco, D. (1992). *English the Chamoru way: Silver edition*. Guam: Images Publishing.
- U.S. Census Bureau. (2001). *Census 2000 Demographic Profile*.
- U.S. Census Bureau. (2012). *Guam demographic profile summary file*. Hagatna, Guam: Guam State Data Center, Bureau of Statistics and Plans.
- Underwood, R. (1989). English and Chamorro on Guam. *World Englishes*, 8, 73-82.
- Underwood, R. (2019). Underwood: We on Guam aren't real Americans. *Pacific Daily News/USA TODAY Network*, pp. Retrieved from Guam PDN: <https://eu.guampdn.com/story/opinion/columnists/2019/04/12/underwood-we-guam-arent-real-americans/3443595002/?fbclid=IwAR0g069VHOxVJwgAfgSc1Ogb--yNGaFsNrICpf5QC8KpQuXWALixxgCAfl>.
- United States Bureau of the Census. (1973). *1970 census of population. Volume 1 : Characteristics of the population. Part 54- 58: Outlying areas, Guam, Virgin Islands, American Samoa, Canal Zone, Trust Territory of the Pacific Islands*. Washington: U. S. Government Printing Office.
- Untalan, F. F. (2019). *Chamorro migration to the US*. Retrieved from Guampedia: <http://www.guampedia.com/chamorro-migration-to-the-u-s/>
- Vaillancourt, F. (1996). Language and socioeconomic status in Quebec: measurement, findings, determinants, and policy costs. *International Journal of the Sociology of Language*, 121, 69-92.
- Wald, B. (1984). The status of Chicano English as a dialect of American English. In J. Ornstein-Galicia, & A. E. Metcalf (Eds.), *Form and function in Chicano English* (pp. 14-31). Rowley, MA: Newbury House.
- Walker, J., & Meyerhoff, M. (2015). Bequia English. In J. Williams, E. Schneider, P. Trudgill, & D. Schreier (Eds.), *Further studies in the lesser-known varieties of English* (pp. 128-143). Cambridge: Cambridge University Press.
- Ward, J. (2018). Guam marks national Vietnam war veterans day. Retrieved from The Guam Daily Post: https://www.postguam.com/news/local/guam-marks-national-vietnam-war-veterans-day/article_396dcaa-3301-11e8-8ec8-132048f21d2b.html.
- Warren, R., & Fulop, S. (2014). The merged vowel of PIN and PEN as realized in Bakersfield, California. *Journal of the Acoustical Society of America*, 135(4), 2292-2292.
- Weinreich, U., Labov, W., & Herzog, M. (1968). Empirical foundations for a theory of language change. In W. Lehmann, & Y. Malkiel (Eds.), *Directions for historical linguistics* (pp. 97-195). Austin: University of Texas Press.
- Wells, J. (1982). *Accents of English I*. Cambridge: Cambridge University Press.
- Widdowson, H. (2003). *Defining issues in English language teaching*. Oxford: Oxford University Press.
- Williams, J., & Myrick, C. (2015). Saban English. In J. Williams, E. Schneider, P. Trudgill, & D. Schreier (Eds.), *Further studies in the lesser-known varieties of English* (pp. 144-164). Cambridge: Cambridge University Press.
- Wolfram, W. (1969). *A sociolinguistic description of Detroit Negro Speech*. Washington, DC: Center for Applied Linguistics.

- Wolfram, W. (1971). *Sociolinguistic aspects of assimilation: Puerto Rican English in East Harlem*. Washington, DC: Center for Applied Linguistics.
- Wolfram, W. (1998). Language ideology and dialect understanding the Oakland Ebonics Controversy. *Journal of English Linguistics*, 26(2), 108-121.
- Wolfram, W. (2003). Reexamining the development of African American English: Evidence from isolated communities. *Language*, 79, 282-316.
- Wolfram, W. (2006). African American English. In B. Kachru, Y. Kachru, & C. Nelson (Eds.), *The handbook of World Englishes* (pp. 328-345). Malden, Oxford, Victoria: Blackwell .
- Wolfram, W., & Schilling-Estes, N. (2003). Dialectology and Linguistic Diffusion. In B. Joseph, & R. Janda (Eds.), *The handbook of historical linguistics* (pp. 713-736). Oxford, Melbourne and Berlin: Blackwell.
- Wolfram, W., & Thomas, E. (2002). *The development of African American English*. Oxford: Blackwell.
- Wolfram, W., Schilling-Estes, N., & Hazen, K. (1999). *Dialect change and maintenance in Outer Banks English*. Tuscaloosa: University of Alabama Press.
- Wolfson, N. (1976). Speech events and natural speech: Some implications for sociolinguistic methodology. *Language in Society*, 5, 189-209.
- Wong, I. (1982). Native-speakers English for the Third World today? In J. Pride (Ed.), *New Englishes* (pp. 261-86). Rowley, MA: Newbury House.
- York University. (n.d.). Lexical Sets [PDF file]. Retrieved from York University: https://www.yorku.ca/earmstro/courses/phonetics/lexical_sets.pdf.

8 Appendix

8.1 *Transcription guidelines*

- do not use punctuation within an utterance: no commas, full stops, question marks, etc.
- start annotations without capitalization
- incomprehensible utterance: []
- unclear utterance: [transcriber's guess in square brackets]
- interrupted word: “-”, use only for an interrupted word, not to indicate interrupted utterances.
The sounds transcribed might be arbitrary, as the word first opted for is assumed and spelling is according to it. Write all repeated words.
- [laughs]
- [chuckles]
- [coughs]
- [whispers]
- [sings]
- yeah any non-standard affirmative starting on a /j/, e.g.: <yeah>, <yep>, <yup>, etc.
- okay don't abbreviate
- mhm any sounds related to <mhm>, <mhum>, etc. (has an unvoiced break in middle)
- mmm back-channeling, sound of agreement or understanding, different from the above <mhm> because it is a constant voiced nasal
- hm nasal pause filler without a break
- uhuh non-nasal version of <mhm>
- umm pause filler closing in a nasal, e.g.: <erm>
- err pause filler closing in a vowel or approximant, e.g.: <uh>
- pff indicates that the speaker is thinking, or sound of derision
- 'cause can be abbreviated when occurring as the shortened form of “because”
- isn't, ain't don't use <in't> etc
- wasn't, weren't don't use <wan't> etc.
- going to don't use <gonna> or <gon>
- got to don't use <gotta>
- I'm going to don't use <I'mma>

8.2 *List of Words Excluded from Quantitative Analysis*

"and", "uh", "that", "i", "but", "had", "it", "my", "um", "in", "of", "on", "at", "they", "have", "he", "she", "to", "get", "getting", "as", "the", "its", "thats", "its", "is", "cause", "be", "see", "me", "b", "he'd", "she'd", "gets", "sisters", "sister", "h", "they'd", "s", "sa", "got", "t", "he's", "it's", "Fayetteville", "gosh", "she's", "if", "a", "im", "i'm", "off", "then", "up", "there", "then", "up", "by", "out", "for", "than", "with", "why", "who", "when", "where", "where's", "what", "what's", "his", "him", "mine", "her", "hers", "them", "we", "we'd", "us", "our", "ours", "you", "your", "you're", "an", "this", "no", "ah", "aha", "ha", "haha", "aw", "oh", "huh", "uhm", "hm", "ya", "yab", "yeah", "yea", "yay", "okay", "kay", "nope", "cuz", "nah", "woah", "wow", "bah", "so", "ur", "urr", "or", "if", "one", "ones", "one's", "yes", "not", "as", "can", "can't", "could", "do", "does", "did", "don't", "didn't", "doesn't", "have", "has", "had", "haven't", "hasn't", "hasn't", "be", "am", "was", "is", "isn't", "wasn't", "will", "won't", "would", "wouldn't", "ain't", "Saipan", "Chuukese", "Chuuk", "Mum", "Taro", "Samoa", "Tagalog", "Leonard", "Yona", "Maina", "Dededo", "Hafa", "Adai", "Chelu", "Par", "Pari", "Dude", "Tamuning", "Tumon", "Merizo", "Malesso", "Barrigada", "Agat", "Agana", "Hagatna", "Santa Rita", "Sinajana", "Talofofo", "Umatac", "Yigo", "Palau", "that's", "err", "umm", "uhm", "they're", "we're", "i've", "there's", "because"